Clinical Lectures
ON
CASES OF DIFFICULT DIAGNOSIS.

BY SAMUEL FENWICK, M.D., F.R.C.P.,
PHYSICIAN TO THE LONDON HOSPITAL.

LECTURE IV.
FÆCAL ABSCESS.

GENTLEMEN,—We have hitherto been directing our attention to cases of abdominal abscesses, and a little consideration will show you how important the subject is, for the chance of the patient's recovery entirely depends upon the accuracy of the diagnosis, and a timely resort to surgical measures often presents the only chance of affording relief. But you might naturally think that such cases are better fitted for discussion by the surgeon than the physician; and so no doubt they would be were it not that from the position of the disease, and the obscurity of the diagnosis in the early stages, the patients suffering from them are usually admitted into the medical wards. When we were discussing the subject of perforation of the vermiform appendage, I mentioned a boy, admitted under my care, who at first presented a tumour in the abdomen, but in whom a swelling afterwards appeared in the thigh, which on being opened discharged fæces. As fæcal abscesses are of rare occurrence, and are often very difficult of diagnosis, I propose that we devote our attention to them on the present occasion. I will first read you an abstract of the case to which I have alluded.

CASE 1.—A boy aged fourteen was admitted in September, 1879. He had suffered for three weeks from severe pain in the right iliac fossa, increased at night, but easier when he lay in the recumbent position with the thigh flexed on the abdomen. He also complained of severe pain of the back, which he stated was more severe than that in the side; this pain he described "as if a knife were being thrust in below his ribs." The bowels were confined, and when they were freely opened by medicine he thought the pain was relieved. The pulse was quick; the temperature 99° in the morning, rising to 100° in the evening. He stated that he had always suffered from constipation, but had in other respects been healthy until six weeks ago, when he fell with great force upon the abdomen. He was able to resume his work, but was attacked by pain three weeks afterwards, which was not at first severe, but had gradually increased. On examination, a round tumour was discovered in the right iliac region, which was extremely tender upon pressure. He remained in the same state until December, the tumour not presenting any alteration, his pain being alleviated by the flexing of the thigh on the pelvis, but greatly increased when the slightest motion of the hip was attempted. The bowels acted regularly; the temperature was usually about 101°, and the pulse 116 or 120. After this the pain gradually subsided, the temperature fell, and he was able to walk about the ward. As he was very weak and anæmic, he was made an out-patient on March 2nd, 1880. He was readmitted on June 15th, severe pain having returned in the tumour; the appetite was bad, the temperature high, pulse 120, and the bowels relaxed. The tumour seemed to be situated higher up than formerly, and was very tender on pressure. In the beginning of July a tumour was noticed in the thigh, which on being opened discharged pus and fæces, whilst the original tumour in the abdomen became smaller and less tender. The wound continued to discharge pus and fæces for some time, and on one occasion blood was passed along with stool from the anus; but the opening gradually closed, although gas was still expelled from the sinus after the feculent discharge had ceased. He improved in health, and left the hospital in July, after an illness of eleven months' duration.

Now, you will naturally inquire where did the mischief originate in this case? It is clear from the tumour in the iliac region being so tender upon pressure, and the pain being increased by the motion of the thigh, that the inflammation had been in the first instance set up around or behind the cæcum; and we have therefore to ask whether this was the result of ulceration of the mucous membrane, or produced by a perforation of the vermiform appendage? In favour of its having originated in the mucous membrane, are the facts of the patient having been very liable to constipation and having suffered a severe blow on the abdomen; but, on the other hand, if the gut had been perforated at an early period of the case, there would have been more severe inflammatory symptoms on his admission. I think, therefore, it was more likely due to a perforation of the vermiform appendage, which had produced a chronic abscess behind the cæcum, and that this, by bursting into the intestine, allowed of the escape of decomposing materials into the connective tissue, and thus led the way to the formation of the abscess in the thigh.

Fæcal abscesses may exist in connexion with any part of the intestinal canal, but they vary greatly both in their causes and effects according to their situation. It will be necessary, therefore, to consider those related to the large and small intestines separately, and I propose in the present instance to direct your attention to the former only. In order that a fæcal abscess should result from the perforation of any part of the canal, it is necessary that the ulceration should proceed slowly so that time may be given for enclosing by adhesions the substances that escape; for the sudden introduction of decomposing matter into the peritoneal cavity always sets up violent and fatal peritonitis. It is because the extension of ulceration to the exterior of the intestine is rarely slow that so few cases of abscesses of this character are met with. In looking over the post-mortem records of this hospital I have only found sixteen cases in which a fæcal abscess is mentioned in connexion with the large intestine. Many other cases of communication between the interior of an abdominal abscess and the colon are recorded, but as it is not stated that the contents were of a feculent character, I have not counted them in the above number. As this number is too small to admit of any safe deductions, I have collected from various authors sixty-six cases in which a communication was discovered after death between an abdominal abscess and the large intestine, and in which the contents were of a feculent character.

The situation of the abscesses mentioned in our post-mortem records varied considerably; thus, in two they were connected with the cæcum, in four with the ascending, in two with the transverse colon, in three with the sigmoid flexure, and in four with the upper part of the rectum. In those I have collected from various sources fifteen were connected with the cæcum, seven with the ascending, seven with the transverse, and six with the descending colon, nine with the sigmoid flexure, and four with the upper part of the rectum. Moreover, as most of the cases terminating favourably had burst or had been opened in the right groin, it is evident that the cæcum, notwithstanding its small length as compared with the other divisions of the large intestine, is the favourite seat of fæcal abscess, and there can be little doubt that the fact that this part is less completely enveloped by the peritoneum, and is therefore in nearer relation to the connective tissue behind it, is the chief reason why such should be the case. An abscess of the kind we are considering may commence external to the gut, and afterwards burst into it, or the ulceration may begin in the mucous membrane. Of the collected cases twenty were of the former class, and thirty-three of the latter.

The origin of the abscesses commencing externally varied greatly; some had originated in the connective tissue around the kidneys, others had their starting-point in a diseased ovary, but more commonly the inflammation had commenced in the connective tissue of the pelvis as the result of irritation of the generative organs, and by bursting inwardly allowed of the escape of the irritating contents of the intestine into the sac. You must not, however, suppose that wherever the bowel is perforated by an abscess from without there is necessarily an escape of fæces into it, for there are numerous cases in our records in which this had not occurred. In all probability much depends upon the size and shape of the opening, which may often act as a valve and permit of the free entrance of pus into the gut without allowing of the exit of its contents.

Ulcerations, commencing internally and producing fæcal abscesses, may be classed into those arising from general and those produced by local causes; the former include typhoid fever, dysentery, tubercle, and cancer, whilst chronic catarrh and stricture are the most prominent of the latter. Where fæcal abscess follows typhoid the seat of the ulceration is

usually in the small intestine, but I have found two cases where the ascending colon had been perforated after this disease, and allowed of the escape of its contents; and in one, in which details are given, the sac of the abscess was formed by adhesions of the neighbouring organs. There were six cases arising from dysentery, one was connected with the cæcum, one with the ascending colon, one with the descending colon, one with the sigmoid flexure, and two with the rectum. In only two the abscess was walled in by adhesions of the neighbouring parts, in the others the sac was in the connective tissue. All were cases of very chronic dysentery, for where I have seen perforation in the more acute forms of the disease rapid and fatal peritonitis has been the result. In some of them an abscess had formed in the first instance external to the gut, and afterwards had burst into it. In eight cases the abscess was the result of tubercular ulceration, and occurred in persons suffering from phthisis. In one the perforation was in the rectum, in one in the sigmoid flexure, and in five in the cæcum, the only remaining case being connected with the transverse colon. In three the walls of the abscess were formed by adhesions of the neighbouring organs, and in five the sac was situated in the connective tissue. When speaking of perforation of the vermiform appendage I drew your attention to the frequency with which ulcers occurred in that part in cases of phthisis; for out of fifty subjects examined in succession at the London Hospital ulcers which had not perforated were found in the appendix in only two, and both of these had died of phthisis. The same tendency to ulceration is displayed by the cæcum, although in a smaller degree; and we cannot therefore wonder that in the majority of cases where a fæcal abscess arises from internal causes in this part of the intestinal tract, a tubercular condition is the most common accompaniment. Perforation of the cæcum in tubercular persons may arise from an enlargement and suppuration of the glands behind it, which afterwards bursts into the bowel, and it is most difficult, if not impossible, to diagnose during life this condition from the thickened ulcerated state of the cæcum that occasionally accompanies phthisis.

Fæcal abscesses are much more rare than might have been supposed connected with cancer of the large intestines, considering how common the complaint is. I have only found four post-mortem examinations of this kind, and in all probability the rarity may be explained by the fact that although perforation is a common result of malignant disease, it almost always takes place suddenly, and, therefore, before there has been time for the effused materials to be walled in by adhesions. Of the four cases, one was connected with the cæcum, and the sac was formed in the cellular tissue of the iliac fossa, and three were caused by disease of the transverse colon, the walls of the abscess being formed by adhesions of the neighbouring organs. In my own practice I have met with a fæcal abscess in the left groin resulting from stricture of the rectum, but this is not a common result of cancer of this part. Two cases are mentioned as having been caused by stricture, the nature of the narrowing not being very clear: one was in the ascending and one in the transverse colon, but in both the stricture was at a considerable distance below the abscess.

Thirteen out of thirty-six cases in which the ulceration commenced internally were attributed to catarrh of the mucous surface; and the comparative frequency of this cause of fæcal abscess probably arises from the slowness with which such ulcers often progress. The different anatomical divisions of the large intestine were more equally affected than in the case of tubercular and cancerous ulcerations, for three occurred in the cæcum, two in the flexures of the transverse colon, four in the descending colon, three in the sigmoid flexure, and one in the rectum. As might have been expected from such situations, the walls of the abscesses were formed by adhesions of the neighbouring organs in nine cases, and in only four cases they were situated in the connective tissue. The causes of the ulceration were attributed either to fæcal accumulations or to the irritation produced by foreign bodies. The tendency of fæcal accumulations to excite ulceration is probably greatest when the general health is much depressed, and this was well illustrated in the following case admitted into my ward.

CASE 2.—The patient, who was about seventeen years old, was in a state of extreme emaciation, and was sent to the hospital on the supposition that he was suffering from intestinal obstruction. The boy, who was evidently insane, had obstinately refused all food, as he said "he was too full to eat," and no action of the bowels had taken place for two or three weeks. There was, however, no evidence of obstruction, and, notwithstanding that he wes forcibly fed, he sank in a day or two from exhaustion. On post-mortem examination the whole of the viscera proved to be healthy, except that the large intestine was vastly overloaded with fæces, and an ulceration existed in the cæcum which had perforated the peritoneum, but the opening was blocked up by a mass of hard feculent matter, so that none had escaped into the cavity, consequently peritonitis had not been set up.

I have collected five cases in which a fæcal abscess had formed in the right side of the abdomen, and in which the sinuses resulting from it healed after a foreign body escaped or was extracted; but, as the patients all recovered, it is impossible to say whether the ulceration had commenced in the appendix or in the large intestine. When you consider the violent symptoms usually set up when decomposing material is introduced into the peritoneum, or is suddenly effused into the connective tissue, you would expect that severe constitutional symptoms would be always present along with a fæcal abscess. This is, however, by no means invariably the case, for in some the contents are walled in by adhesions, so that they are not brought into contact with the bloodvessels, and consequently absorption does not occur. This is probably also the reason why abscess of the liver is, comparatively, a rare consequence of abscesses of this kind. In some instances decomposition of the contents of the abscess takes place very rapidly, and sloughing of the neighbouring organs is produced along with the constitutional irritation that accompanies such a condition.

When examining other forms of abdominal abscess we found there was a considerable difference in the liability of the sexes to them, but this does not appear to be the case with that which we are now considering, for of fifty-three cases twenty-seven occurred in males and twenty-six in females. When we analyse them more carefully, differences appear, which, however, are easily explained: thus, of twenty cases where the abscess commenced external to the gut only seven were males, the increased liability of the opposite sex having arisen from the greater frequency with which abscess occurs in or around the pelvic viscera. All the dysenteric cases were males, the disease having been in each instance contracted in tropical countries, whilst of seven tubercular cases five were females and only two were males.

As regards the influence of age, twenty-six occurred between twenty and forty years of age, and only two were recorded in children under ten. When fæcal abscess commenced externally, it was most apt to take place between twenty and forty, fourteen out of twenty-two having been at that period of life. We before found that perforation of the vermiform appendage was more liable to occur in chronic than in acute phthisis, and the same appears to be the rule in the disease we are now examining, for four out of six were above thirty years of age, and none were below twenty. Catarrhal ulceration is most apt to form fæcal abscess in persons of middle or advanced life, only two out of fifteen being below thirty, whilst three occurred in individuals above seventy.

It is a matter of importance to remark how frequently, as in Case 1, fæcal abscesses have followed injuries to the abdomen. No doubt in many inflammation is set up in the first instance external to the gut, and the abscess subsequently bursts into it, as was probably the case in the following:—

CASE 3.—I was consulted respecting a man between fifty and sixty years of age who had some months previously received a severe injury to the abdomen. A short time after the blow the patient experienced some pain in the part and a small, hard, deep tumour was discovered in the right iliac fossa. This gradually enlarged, and when I saw him the tumour was of considerable size and deep fluctuation could be felt in it. An opening was made into it, pus and fæces were evacuated, and the surgeon was able during the operation to pass his finger into the large intestine. Fæces were discharged for many months through the wound, but eventually it closed. The small size of the tumour and its hardness in the early stage would render it probable that an abscess had first been formed either in the abdominal walls or near the cæcum, which afterwards opened into the gut, but such an explanation is not applicable to all the cases of ulceration of the colon following an injury. This is evident from the following case:—

CASE 4.—A man, forty-two years of age, was admitted into this hospital, who stated that he had never had a single day's ill-health until ten weeks before, when he was drunk and was roughly handled by the police. Ever since that time he had suffered from pains of the abdomen, which had become suddenly more intense ten days before his admission, and during this period there had been no action of the bowels. After death the cæcum was found adherent to the abdominal parietes, and a smaller opening was discovered in it, from which fæces exuded as soon as the adhesions were separated. The ascending colon was much dilated, and distended as far as the middle part of the transverse colon, and at this point was an ulceration, one inch and a half wide, extending round the mucous membrane. There was no abscess either in the abdomen or its walls. In this case the immediate cause of death seems to have been the perforation of the cæcum produced by the distension arising from the ulceration of the colon, and from the circular shape of that ulcer we might suspect it to have been of a cancerous character, but this is not expressly stated to have been the case. From the pain having commenced directly after the injury, I think it more probable that the mucous membrane of the gut had been injured, and had been subsequently separated by sloughing. This is not so improbable as at first sight it might appear to you, for numerous cases are on record where persons who had suffered from a blow to the abdomen were afterwards suddenly attacked by peritonitis, and in whom, on post-mortem examination, a perforation of the intestine was discovered, produced by a small ulceration of the coats of the gut.

(To be concluded.)

ABSTRACT OF TWO

Clinical Lectures

ON

INTRA-CRANIAL SYPHILIS.

Delivered in the Western Infirmary of Glasgow,

BY DR. McCALL ANDERSON,

PROFESSOR OF CLINICAL MEDICINE IN THE UNIVERSITY OF GLASGOW.

LECTURE II.

GENTLEMEN,—In my last lecture I gave you two illustrations of intra-cranial disease which we may aptly compare this morning with two others in the wards.

This woman, who is married, and thirty-six years of age, came to us on March 20th, 1885, complaining of intense pain in the head and indistinctness of vision with the right eye, her illness being of about three months' duration. There is nothing of special interest with regard to the family history, nor with regard to her personal history, until the onset of the present attack. About twelve weeks ago she was awakened about midnight by an intense pain, which was experienced all over the crown of the head. She got out of bed and vomited, and on this occasion the vomiting recurred twice, the attack lasting about twelve hours. For three weeks after this she was able to continue her work, although she was never entirely free from suffering for more than two or three hours at a time, the paroxysms of pain lasting from one to three hours as a rule, and being often accompanied by vomiting. At the end of this time the pain had become so commanding, that she had to take to her bed, and she has never done any work since. For the last three weeks before admission the pain was confined to the right side of the head. It was described as being of a stabbing character, and accompanied by throbbing. A few weeks after the onset of her illness it was observed that she had an internal squint, and she began to complain of indistinctness of vision on the right side. The eye itself was also extremely painful, at times feeling very hot, at times as if a piece of ice were placed upon it. She looks older than her years, is much thinner than she used to be, and her memory has failed somewhat. On asking her to localise the pain, you will observe that it is limited to the right side of the head, that there is a general tenderness of the posterior two-thirds of that side, while there are two specially tender spots, one about three inches above the right eye, and the other about three inches posterior to that. But while there is hyperæsthesia of this portion of the right side there is complete anæsthesia of the right side of the brow, and on pressing upon the right eye she says that there is also scarcely any feeling in it; in fact, there is paralysis of the ophthalmic nerve (first division of the fifth). You will notice also that the right eye is turned inwards, and that she is unable to move it in an outward direction. The external rectus muscle is therefore paralysed, so that the sixth nerve is also involved in the disease. "The dimness of vision," says Dr. Reid, "of which the patient complains, is due to the internal squint, on account of which rays of light are not thrown properly on to the macula lutea. Colour perception is perfect, or very nearly so, with both eyes. The area of the field of vision is complete. The ophthalmoscope reveals pinkness of the optic nerve, with engorgement of the optic vessels; this might be caused by a very slight degree of pressure. It is present in both eyes. The right pupil is unduly contracted, but responds to the action of light, and also for accommodation. There is present secondary deviation (or the convergence) of the healthy eye, which shows that this case comes under the category of peripheral paralysis, meaning by that term that there is a lesion of the sixth nerve at some part of its course, not only up to its apparent origin, but to its nucleus." The tongue seems to be protruded a little to the left side, and there is decided deafness on the right side, as the patient can only hear a watch when it is close to the ear; but there is no reason to suspect that this is the result of the present illness, as the symptoms point to chronic catarrh of the middle, and not to disease of the internal, ear, and as she is quite unaware of the duration of the deafness. There is no paralysis of the limbs.

As regards the seat of the lesion, anatomical considerations would lead us to suspect that it is at the base of the brain on the right side, probably in the vicinity of the pons Varolii, but what is of more importance is to ascertain the nature of the lesion. In connexion with this point there is strong evidence in favour of its being syphilitic in character, and for these reasons:—The pain in the head is distinctly nocturnal in character; the cerebral nerves, especially the sixth nerve, are exceedingly liable to suffer from syphilis; there is a dirty earthy pallor of the skin, and the inguinal glands are enlarged. Further, she has been married for eight years, and about twelve months after her marriage she had a miscarriage at the fourth month; two years thereafter she had a child born at full time, who is alive and healthy; then she had two miscarriages at the third month; and lastly, three years ago, she had another child born at full time, who is also reported to be alive and healthy. This part of the family history is not conclusive, but so far as it goes it is rather suggestive of a syphilitic taint. At all events, we shall put her upon antisyphilitic treatment. This will consist in rubbing into any soft part of the skin, such as the inside of the thighs, one drachm daily of Shoemaker's mercurious oleate ointment, and I trust that when you next see her some improvement at all events may be observed in her symptoms.[1]

This other patient, a clerk by occupation, and thirty-seven years of age, was admitted into Ward 2 on March 10th, 1885. His family history is good, but he was always considered a delicate child, and after leaving school, while employed in a coalpit, he contracted inflammation of the right lung. Nine years ago he became a clerk, but his employment did not involve very close confinement.

About six months before admission, on rising from the sofa, he felt a curious sensation in his head; his face was drawn to the left side, and his right arm was twisted up behind him. He was able, however, to walk to the door and call for help, but immediately thereafter he fell to the ground unconscious. His friends informed him that the fit lasted for about ten minutes, during which time he frothed at the mouth; the face was drawn to the left side, and the right

[1] The mercurial treatment was commenced on March 23rd. On April 3rd the following note was taken: "Patient is much improved in most respects. The pain in the head is less; the tenderness on pressure, too, is almost gone, except at the originally most tender spot in front. Sensation in the region of the ophthalmic nerve is returning, so that she can now feel moderate friction with the finger, although she can still allow the eyeball to be touched without wincing. The pupil remains contracted, but the internal squint is rather less." She left the infirmary on the 17th by her own desire, there being then no further material improvement; but the result of the treatment has been quite sufficient to prove the syphilitic nature of the illness.

side of the body was convulsed. On regaining consciousness he felt exhausted and inclined to sleep. Five weeks after this he had a second fit, which was not so severe. On this occasion he fell suddenly to the ground, was convulsed on the right side, but retained consciousness throughout the attack. After that he had attacks daily until three months ago, when under the influence of treatment they ceased, and have not recurred. Before each attack he had a feeling of giddiness for some time, and immediately preceding it a curious and indescribable sensation in the palm of the right hand. Nearly from the first there has been constant trembling of the right hand, and for three or four months the right arm and leg have been gradually becoming weak. Almost from the first, too, he has been troubled with attacks of pain, limited to the right side of the head, which soon became very intense, and which continued for hours, but for the last three weeks they have not been so severe. For about three months there has been pain in the right hip-joint, which, however, is not limited to the joint, but extends a little way up the side. For some weeks, too, he has been troubled at times with giddiness, and with dimness of vision, which appeared to him to be limited to the right side of the right eye. In consequence of this on more than one occasion he came into collision with vehicles passing him in the street on his right side.

There is considerable improvement in his condition now, for not only has he had no convulsive seizures of late, but the hemicrania is much less severe; the paresis of the arm and leg, too, is less distinct, although he still occasionally strikes the floor with the sole in advancing the foot; and the dynamometer registers only 55 kilogrammes on the right side as compared with 85 on the left. Indeed, the most marked feature in his case at present, in addition to frequent giddiness, is hemiopia, which I now demonstrate to you. The following is Dr. Reid's report. "With the right eye he cannot see an object which is placed the least to the outside of a line drawn directly through the middle line of the eye. With the left eye the defect is discovered on bringing an object towards the inner side, but the defect is not so great as with the right..... The ophthalmoscope gives negative results."

There is good reason to believe that the lesion in this case is seated at the base of the brain, and on the left side, because the paresis of the arm and leg and the convulsions were on the right side. The hemiopia, too, is evidently due to implication of the left optic nerve (behind the commissure), which sends the greater number of its fibres to the right eye—the more affected—and the lesser number to the left, and which supply the inner part of the right eye, and the outer part of the left.

As regards the nature of the lesion, there is little doubt that it is syphilitic, for, on examination, a distinct, though not very striking, scar is seen on the upper surface of the corona of the penis, which he now admits to have been the result of a suppurating sore about four years ago, and which he was told was a soft chancre. Some months afterwards, however, he had a sore-throat and numerous ulcers on the upper surface of the tongue, although no cicatrices are left. His hair, too, fell out a great deal, but he never observed any eruption upon the skin. It is not improbable that the pain in the hip is of a syphilitic nature, but, in the absence of nocturnal exacerbations, there is no certainty of this; and there is some enlargement of the inguinal glands and of those on the inner side of the arms, just above the elbows. Such being the case, we shall with much confidence treat him in the same way as the last two patients—namely, by inunction with mercurious oleate ointment, and when I show him to you again, I hope that there may be some material improvement.[2] It may, perhaps, surprise you to observe that all the cases which have been brought under your notice, and which are late manifestations of syphilis, have been put upon mercurial treatment, while most authorities tell you that iodide of potassium is the remedy for this stage of the disease. But a long experience has taught me not only that mercury is useful in old-standing cases of syphilis, but that more brilliant results are to be obtained from it than when we have to deal with its earlier manifestations; and that we often succeed with mercury after failure with even large doses of the iodides, as in the second case which I have brought under your notice.

While, then, I have thorough confidence in mercurial treatment, I would not like to promise a complete removal of the symptoms by means of it in cases of intra-cranial disease, for syphilitic deposits in the delicate nerve substance may, by their pressure, irreparably damage it, or, by their irritation, lead to secondary disease of a non-syphilitic character in the surrounding parts, over which anti-syphilitic remedies can have no influence. We must, therefore, be more cautious as to our prognosis of visceral syphilis when the nerves or nerve-centres are involved than when other less delicate tissues and organs are in question.

[2] Treatment was commenced on March 30th, the symptoms then being as follows:—Hemicrania; loss of memory and frequent giddiness; hemiopia; paresis of right leg and arm (dynamometer—right 75, left 95, kilogrammes); tremor of right hand, and pain in the right hip extending up the right side. On May 15th the following report was taken:—Patient is now in a very different state. The hemicrania has been gone for fully a fortnight; the memory is perfect and the giddiness gone; the paresis of the leg and arm is imperceptible (dynamometer—right 106, left 112, kilogrammes); and the pain in the hip and side is no longer felt. There is still, however, the slightest tremor of the hand; and while the vision of the left eye is quite restored, and that of the right distinctly improved, he is still unable to see objects placed much to the outside of the middle line with the right eye.

CASE OF

REMARKABLE RISINGS AND FALLINGS OF THE BODILY TEMPERATURE,

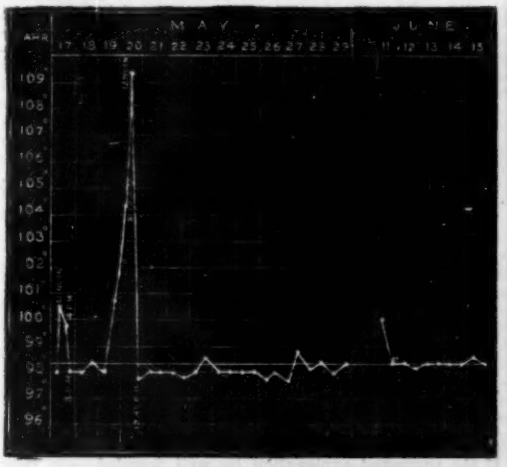
WITH REMARKS.

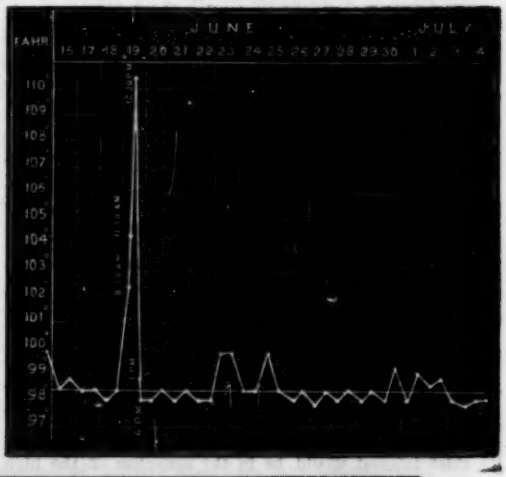
BY G. E. PAGET, M.D, F.R.S.

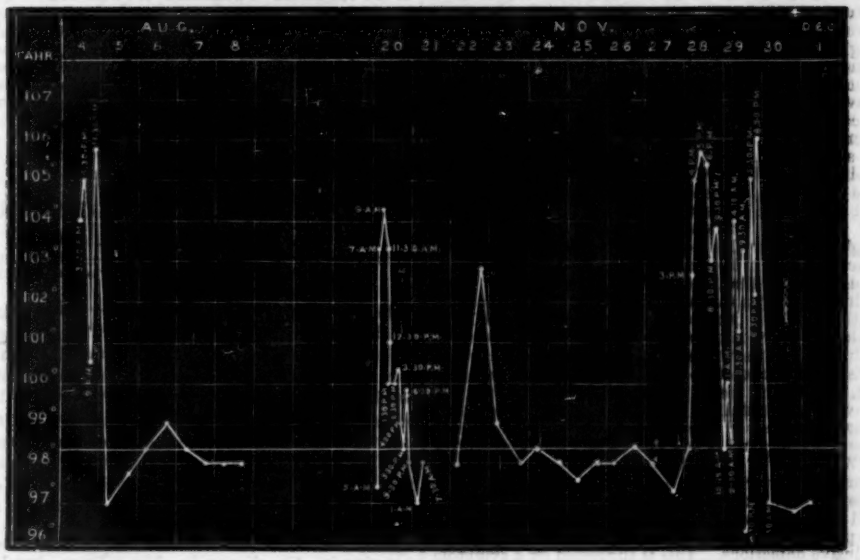
DAVID K——, aged thirty-four, a carpenter, was admitted into Addenbrooke's Hospital on Oct. 8th, 1881. He had been married two years, but had no children. There was a probable history of syphilis at the age of twenty-three, but not of secondary symptoms. Health reported good prior to Christmas, 1880. Shortly before that Christmas he "cricked" his back while putting in a window frame. He was standing on a ladder and bending himself far back to take hold of the frame, and in so doing felt a sudden sharp pain in his back. The pain passed off in about ten minutes, and he then resumed his work, and was never laid by. But from that time he became subject to "gnawing" pains in his shoulders and down his arms. Three months before admission to hospital he began to suffer from giddiness and aching pains across his forehead, and was frequently troubled with double vision. These head symptoms continued for a month, when he sought medical advice, took medicine, and was relieved of them. A month before his admission he began to feel pain in the spine. It was always aggravated at night, and for a fortnight was severe, but then subsided, and he then began to notice involuntary startings of his legs and some impairment both of their motor power and sensibility. The power and sensibility rapidly failed, so that at the end of a week they were wholly lost, and had been so for a week before his admission to the hospital. For three days there had been inability to pass urine, incontinence of fæces, and a sense of constriction round the waist. His general appearance was that of a robust, fairly healthy man. His legs were absolutely paralysed for voluntary movements. They were slightly œdematous, and were affected with frequent involuntary starting movements. Their reflex movements, on tickling the soles of the feet, were exaggerated. There was no ankle clonus. From the margin of the ribs downwards the skin was completely insensible to contact, heat, or pain. Above this level and up to that of the nipples these sensibilities were impaired, but not wholly lost; above the nipples they were normal. His right pupil was larger than the left, and he said that the sight of his right eye was not so good as it had been formerly. The optic discs were normal. There was a superficial bedsore, two inches and a half in diameter, on his right buttock. Slight tenderness on percussion of upper dorsal spine, but no pain from hot sponge. Respiratory movements normal. Urine acid, sp. gr. 1034, free from albumen and sugar, but deposited some pus-cells and phosphatic crystals. He slept well at night, and his appetite was good. At this time there was nothing very extraordinary in his temperature. Its highest point was 103·3° F., on the evening of Oct. 11th, subsiding in the morning to normal; and in the evening it subsided from day to day until the 19th, when the temperatures became regular, varying only between limits of 97° in the morning to 99° in the

evening. The remarkable rises of temperature which afterwards characterised the case did not begin before August. During the interval there was nothing noticeable more than might have been expected in such a case. His first bedsore had healed, and so had three other small sores which subsequently formed on his ankle and heels. He had incontinence of urine and fæces. The notes show that he was gradually recovering sensibility in his lower extremities, but very little voluntary motor power. His bowels were torpid.

On Aug. 3rd, 1882, he felt faint and giddy. On the morning of Aug. 4th he took a senna draught. At 3.30 P.M. he felt faint, complained of abdominal pain and began to shiver; felt cold, then hot, and then, at 9 P.M., sweated.







The rigor recurred at 11.30 P.M. His temperature at 3.30 P.M. was 104° F.; at 4.30 P.M. 105°; at 9 P.M. 100·6°; at 11.30 P.M. 105·8°; at 7 A.M. 97°, the last fall being 9°; and then it resumed its usual daily condition of somewhat subnormal. The pulse during the rigor was 140, and next morning it was 92. On Aug. 5th the bowels acted freely (calomel and senna having been taken), the motions being dark and foul-smelling. After this his temperature remained about normal until Sept. 23rd, when, after some hours of abdominal pain and shivering (not followed by sweating), the temperature at 5.30 P.M. was 105°, the pulse being 156. Next morning the temperature was 97·2°; the pulse 100.

Oct. 4th.—Another attack of severe pain in the abdomen, followed by rigors, during which the bowels acted. Temperature at 11.30 P.M. was 104·4°. Next morning 97·8°. Pulse, during rigor, 140. Again, some quiet weeks of normal or subnormal temperatures, and then, on Nov. 20th, another thermal storm, preceded by severe rigor and abdominal distress, the pulse varying from 148 to 152 and the temperature being in the axilla 103·4°; in the rectum 103·6°; in the mouth 102·4°. Another rise to 102·8° on the 22nd, and then, after the usual subsidence, a more considerable thermal storm, or succession of storms, on the 28th and 29th, ushered in by violent shivering, pain in the abdomen, and sense of tightness in the abdomen, back, and legs. The temperature oscillated. On the 28th, having risen from normal to a maximum at 5.30 P.M. (this maximum being in the axilla 105·2°, in the rectum 105·7°, and in the mouth 102·6°), it had fallen to 103° at 8.30 P.M., was 103·8° at 9.30 P.M., normal at 12.15 A.M., 100° at 1 A.M., 98·6° at 2.30 A.M., 104° at 4.10 A.M., 101·4° at 8.30 A.M., 103·4° at 9.30 A.M., 96·4° at 4.30 P.M., 105° at 5.30 P.M. (rising 8·6° in one hour), 102·4° at 6.30 P.M., 100° at 8.30 P.M., 97° at 8.30 A.M. of Nov. 30th. On the 28th the pulse was 152 at 5.30 P.M.; during the night severe rigors occurred at intervals, the breathing became very rapid and laboured, and the lips blue. He was again seized with rigors at 4.20 P.M. of the 29th, and his pulse became so feeble, fluttering, and rapid that it could not be counted. At 7 P.M. there were again shivering and oppressed breathing. The

next rise of temperature was on Jan. 16th, 1883, when it reached 103° at 9 P.M., the pulse being then only 76; but at 10 and 11 P.M. he had severe attacks of dyspnœa, the face and lips becoming dusky. Before this time the sensibility had been quite restored in his legs. After this, for many months his temperature was never more than half a degree above normal, more commonly half a degree below it; but on May 20th it rose to 109·2°, he was sweating profusely, and his face was dusky, but his pulse only 80, and respiration 22. Half an hour afterwards, on his bowels being freely relieved, he said at once that he felt much better, and his temperature was found to have fallen to 97·8°—i.e., 11·2° in three-quarters of an hour. Again, on June 19th, he complained of abdominal pain and discomfort, and his temperature rose rapidly to 110·4°. Immediately after his bowels were relieved, and then the temperature fell 11·6° within half an hour, and continued falling till it reached 98°. After this only one very great rise took place—namely, in March, 1884; on other days the temperature varied only from 98° to a little above normal. No deformity occurred in his spine, no "contracture" or persistent rigidity in his legs, nor more wasting of their muscles than could be accounted for by disuse. His general nutrition was well maintained. The incontinence of urine and fæces was persistent, but he was conscious of their evacuation, and could utilise a urinal.

In May, 1884, he was removed to the infirmary of the union workhouse, where he remains (May, 1885) in much the same state, keeping his bed. We have no thermal reports from this infirmary, except that on April 30th, his bowels being confined, his temperature was found to be 104°; and when they were relieved became normal.

Remarks.—The case shows that enormously high temperatures of the body are not necessarily dangerous to life, if they be transient, and the occasion on which a temperature of 109° was accompanied by a pulse of 80 and respiration 22 in a minute shows that an excessive heat of the blood does not *per se* much accelerate the heart's action or the respiration. The mere facts of the case seem worth recording, but its chief interest would be in the *causation* of the high temperature, if this could be explained satisfactorily. It seems worth while to make the attempt. It appears that the risings of temperature were due to increased production of heat, not to checks on its loss. That a chief condition of its production must have been the lesion of the spinal cord. That, having regard to recorded[1] cases of injuries of the cervical cord, and of the effects of its section in animals, we may infer that the seat of the lesion was of importance. But it is a point of interest that the lesion in this case was lower, being not in the cervical but in the dorsal cord at or near the origin of the second dorsal nerve. That the increased production of heat took place not equably in all parts of the body, but chiefly, if not solely, in parts physiologically below this point in the dorsal cord. There is evidence of this in the axilla and rectum temperatures being much higher than that of the mouth. That these parts include not only a vast majority of the muscular masses, but also the liver and other abdominal organs to which the splanchnic nerves are distributed—i.e., the two chief seats of heat production. But as the lesion of the cord was permanent, and the risings of temperature only occasional and so strangely transient, the chronic lesion could not have been the sole cause, however essential as a condition. This occasioning cause must have been of a transient kind, for its immediate effects were fleeting, and it left little, when it left any, after effects. What was it? The obvious suggestion of a renewal of inflammation, or even mere congestion, of the cord seems inconsistent with phenomena so transient. No such phenomena had been observed in the first stage of the disease. Of other hypotheses there seems only one to which there are not conclusive objections. This is suggested by a symptom by which the strange risings of temperature were preceded or accompanied—the symptom of irritated bowels, irritated by retained fæces or by purgatives. That some relation did exist between the intestinal irritation and the abnormal production of heat is evidenced both by their close sequence or concurrence in time, and by the equally striking fact of the rapid falls from high to low temperatures immediately on the bowels being relieved of the irritation. It is no doubt conceivable that the bowel irritation and rise of temperature were both effects of the same cause. But the irritation was on most occasions distinctly observed to precede the rise of temperature, and its subsidence to be followed by the fall. The sequence suggests that the former may have been the cause of the latter. How it might be so is not obvious, yet is not wholly beyond explanation. It is conceivable that reflex action through the cord might stimulate to increased metabolism. But, besides the want of evidence that such stimulation of the cord can raise the temperature, there is the objection that stimulation of a splanchnic nerve would constrict the arteries in its vascular area, and thereby check the production of heat. The effect might, however, be produced by inhibitory influences. The condition of the patient, with his spinal lesion, was like that of an animal which has recovered from the first effects of experimental section of its spinal cord. At the point of lesion was an impediment to vaso-constrictor impulses proceeding downwards from medulla and cervical cord; and the great thermogenic areas below the lesion were in a state abnormally favourable for the dilatation of their minute arteries, and thereby for increasing their supply of blood and consequently the metabolism of their tissues. Intestinal irritation would be directly inhibitory of local tone in the vascular area of the bowels, and would be the more efficient because the tone was already enfeebled as a consequence of the spinal lesion. And, besides this, there is evidence that the over-production of heat took place, not in the abdominal organs only, but in all parts of the body physiologically below the spinal lesion. This more general effect might be the result of afferent impulses, through the splanchnic nerves, inhibiting the feeble vaso-tonic influence proceeding from the small portion of the cord between the origin of those nerves and the lesion above them, and inhibiting likewise any enfeebled tonic impulses which may have proceeded from the cervical cord and medulla, or from the sympathetic ganglia. Vaso-dilatation would follow on these inhibitions, and vaso-dilatation in the abdominal viscera and greater part of the muscles would largely augment the production of heat. I am aware that this explanation falls far short of a demonstration. The causation of the phenomena is obscure; but if the suggested explanation be well founded, our view would be enlarged as to the agency of afferent nervous impulses in the thermo-taxic mechanism, and it would be more restricted than at present as to the agency of the supposed thermal centre in the medulla. It would suggest that the controlling function of this centre is confined to checking the production of heat; and that among the chief causes of its production are not only impressions of cold on the skin, but also impressions on the inner surface of the intestinal canal.

Cambridge.

[1] By Brodie, Hermann Weber, and Churchill.

CLINICAL NOTES ON THE TARSAL TUMOUR.

By J. VOSE SOLOMON, F.R.C.S.,

PROFESSOR OF OPHTHALMIC SURGERY IN QUEEN'S COLLEGE, AND SENIOR SURGEON OF THE EYE HOSPITAL, BIRMINGHAM.

THE tarsus is frequently the seat of a well-defined tumour, of the size of a boiled green pea, which has a tendency to soften and discharge itself by ulceration through the cartilage on its conjunctival surface. It is a disease of the Meibomian follicles, from which no age is exempt, though it is more frequent in the interval of adolescence and the middle period of life, and oftener among women than men.[1] I have seen the tumour in an infant in arms, and occasionally in a man well advanced towards the patriarchal term of life. It varies in size and number. I operated upon one as large as half a cob-nut, which almost completely covered the upper eyelid, and caused acute inflammation of the integument covering it. The disease is often solitary; but I have seen the upper eyelid studded with little tumours of the size of partridge-shots, and in this instance they had excited considerable distress and conjunctival inflammation. In the upper lid the tumour is more often situated near its centre than in the lower, where the extremities of the cartilage appear to have a greater predisposition to the disease; and it is here also that the morbid process extends occasionally into the free margin of the tarsus. In cutting into a tarsal tumour, pus sometimes escapes from its centre, no indication

[1] In eighty-nine cases registered at the Birmingham Eye Hospital, 65 per cent. were females and 35 per cent. males. I am indebted to Mr. Ensor, our house surgeon, for these figures.

of its presence being afforded by the colour of its integument, which retains in many cases a normal appearance; whereas in others the growth of the tumour not infrequently excites inflammation of the skin covering it, and the underlying cellular tissue may become the seat of an abscess. The evacuation of pus by incision from either of these situations is not followed by reduction of the inflammatory state, the tumour apparently acting as a foreign body, for on its removal all irritation soon subsides. In a few cases complaint is made that the vision is dim, which disappears on removal of the substance; in some there is pain with a sense of weight, on account of which surgical aid is sought. The tarsal tumour sometimes disappears by absorption, independently of treatment of any kind. Its tendency is to soften, evidence of which is afforded by the appearance of a dark mark of irregular outline on the conjunctival side of the swelling; and if not interfered with, this part ulcerates, the jelly-like contents escape, and a rather hard button-shaped granulation results, which by friction on the eyeball may occasion much pain and inconvenience.

In a case recently under my care at the Eye Hospital the tumour, which had not softened, bled when sliced as freely as if it had been a nævus. If the removal of the tumour is decided upon prior to softening having taken place, the whole of the disease should be excised, or the cure will not be complete, and reproduction be almost certain. And where the growth has invaded the free border of the tarsus it must be removed by the knife, care being taken that the notch in the cartilage does not implicate the skin. Large tumours in a state of inflammation involving the integument are most conveniently treated by excision externally. Where softening has been evident, I have sometimes trephined the conjunctival aspect of the growth, but it is more painful than a crucial incision. The application of solid nitrate of silver to the walls of the emptied cyst I hold to be a barbarism altogether unnecessary, and often occasioning much suffering and loss of time to the patient.

Birmingham.

NECROSIS OF LUMBAR VERTEBRA OF OBSCURE ORIGIN; RAPIDLY FATAL RESULT.

BY JAMES Y. TOTHERICK, M.D.,
HONORARY PHYSICIAN TO THE WOLVERHAMPTON GENERAL HOSPITAL.

ON Sunday, March 22nd, I was sent for by Mr. Cooke of Tettenhall, to see with him a young gentleman, aged fifteen, who had been complaining for some days of symptoms which were difficult to understand. On the Wednesday preceding he had called on Mr. Cooke, stating that he had a pain in the stomach, but not looking particularly ill, and doing his school work as usual. On the next day, not feeling so well, he kept his bed, and Mr. Cooke saw him. He then complained of severe pain in the back, which was tender to the touch, and in the abdomen, which was distended. His temperature was raised and his pulse quickened. He was very closely questioned as to whether he had had any accident or injury, but steadily maintained that he had not. Nor could it be made out that he had eaten anything injurious, the only questionable thing having been some preserved plum-pudding the previous Sunday. These symptoms—the abdominal distension and pain and the tenderness in the dorsal region—continued and increased, with a temperature which had risen to 102·5°, and a pulse of 100, until the Sunday afternoon when I saw him. At this time the patient was restless, flushed, moaning with pain, impatient of being touched anywhere, but shouted on any attempt being made to handle the greatly distended abdomen, or the back in the lower dorsal region, and for about three inches on each side of the spinal column. Temperature 102°; pulse 100; respiration 22. Six leeches had been applied to the back, and had given some temporary relief, but it was evident that the general progress of the case was rapidly down-hill. The bowels had been opened both by castor oil and enema, and there had only been a little sickness once. The urine was normal. Six leeches were again ordered, and opium was given to relieve the pain and the distension, which were thought to be due to peritonitis. Next day the condition was much the same; the symptoms perhaps somewhat relieved, but the general condition not improved. In view of what we considered to be the condition of peritonitis without any obvious cause, we thought that a surgical consultation was advisable, and the same day Mr. Vincent Jackson saw the case with us. He, however, declined to interfere by any surgical exploration, not considering such a step justifiable by the history or state of the case. The temperature had risen to 102·5°. The patient was somewhat delirious, loudly complaining if handled or moved in any way. For the next two days there was no material alteration in the symptoms. The temperature had once risen to 103°, but on the Thursday had come down to 100°, and the tympanites and most of the tenderness over the abdomen had disappeared. The bowels opened naturally. Urine had to be drawn off by catheter night and morning. About this time appeared some swelling and tenderness in the left elbow, and the next day a red and painful swelling in the first two knuckles of the left hand, and in each place there was fluctuation. It was now evident that we had to do with a case resembling pyæmia, but what had given rise to it was not manifest. The boy was, however, put upon pretty frequent five-grain doses of quinine and some stimulants, with apparent temporary relief; but the temperature again rising very rapidly, the cold pack was employed, with the effect of keeping the temperature quite manageable. The stupor, however, increased, and early on the Sunday morning he died quietly.

Autopsy, forty-four hours after death.—Cadaveric rigidity only in lower limbs. Red staining and leech marks on back. Abdomen distended and of a blue colour. Head: Cerebral membranes healthy; veins fuller on right side than left; brain itself normal. Thorax: Left pleural cavity contained seven ounces of turbid serum; left pleura covered with a thick layer of recent plastic lymph making the lung adherent; right lung also adherent but less markedly so; pericardium healthy; partly decolourised clots in both ventricles; heart itself healthy. In the upper lobe of the left lung were numerous small white lobules, some of which contained liquid pus. The lower lobe was collapsed but floated in water. The right lung was crepitant in the upper lobe, but on the free edge were four wedge-shaped consolidated patches dark in colour, and in these patches were small areas of softening. The rest of the lung substance was emphysematous in the upper lobe. In the middle lobe were similar patches of consolidation with areas of softening. The lower lobe was almost solid, yellowish soft patches being scattered through its substance, some purulent and some apparently caseating. Spleen healthy. Liver: Pale, soft, and large; in one spot was a collection of pus about the size of a shot. Kidneys: Soft in texture, of the usual size, and rather dark in colour. Intestines and peritoneum: Both healthy, with some post-mortem staining. In the first and second carpo-phalangeal joints of the left hand were collections of thick pus, extending from inside the joints and forming abscesses outside. On opening a slight swelling of the left elbow-joint a collection of pus was also found infiltrating the joint. On turning over the body and cutting through the spinal muscles pus welled up in large quantities. The periosteum of the spinal canal was intensely inflamed, and the canal external to the cord was filled with pus, which was also infiltrated amongst the spinal muscles; but the visceral surface of the membranes of the cord was free from inflammation and healthy. On examination of the vertebræ, the body of the first lumbar was found to be quite soft and infiltrated with pus, presenting internally a marked contrast with the vertebra above it and the one below, both of which were hard and of a dark livid colour.

Remarks.—Here was a strong, robust, healthy lad, one of twins, with a good family history, suddenly and without ascertainable cause taken with a fatal illness which must apparently have begun in acute inflammation of the body of the first lumbar vertebra, and presenting in a few hours all the symptoms of acute peritonitis, without, indeed, much constipation or sickness, but with great distension and extreme tenderness. The post-mortem examination revealed a large quantity of pus, infiltrated amongst the deep muscles of the loins; but during life the most careful examinations only produced extreme pain without any feeling of fluctuation. The changes in the lungs were also quite a revelation, as during life the breathing, beyond being a little hurried, was only slightly affected, and only a few mucous râles were audible on auscultation except on the last day, when some dulness was discernible. The post-mortem examination, which was performed by Dr. Dingley of the

Wolverhampton Hospital, was a most tedious business, and the nature of the case was only got at by carefully tracing the various lesions up to their fountain head. And even now the origin of the disease is a mystery. What caused the acute necrosis of the lumbar vertebra? There is no history of a blow or of a sprain, or even of a strumous tendency. I must content myself with putting it on record as a curious case, having no theory to advance which will satisfactorily explain its origin.

Wolverhampton.

CASE OF

SUCCESSFUL OPERATION FOR EXTROVERSION OF THE BLADDER IN A FEMALE.

BY J. GREIG SMITH, M.A., F.R.S.E.,
SURGEON TO THE BRISTOL ROYAL INFIRMARY.

THE patient, a weakly peevish child, three years old, was sent to the Bristol Royal Infirmary in October, 1884, to be operated upon for extroverted bladder. The deformity presented no special features. The gap arising from deficiency of the pubic bones was about an inch in breadth, and the recti muscles were correspondingly separated below. The tumour was about the size of a pigeon's egg, red and angry-looking, covered with vascular papillæ on its lower aspect, exquisitely tender to the touch, and discharging large quantities of ropy purulent mucus. It overlapped and concealed the openings of the ureters. Running down from the tumour was a deep groove overlying a rudimentary vagina, into which a probe could be introduced for an inch. No uterus was felt. The labia majora were over-developed, but the labia minora were enormously hypertrophied from constant irritation by the dribbling urine. The rectum prolapsed at every action of the bowels to a distance varying from one to four inches; occasionally it extended half way down the thigh.

I began the operation with the intention of converting the rudimentary vagina into a urethra, but the child lost so much blood from the excessive vascularity of the parts cut that she had to be removed from the operating table before this was completed. And when, at the second operation, I saw my way to provide a sufficiently long artificial urethra by other means, I thought it wiser to leave the vagina to develop whatever potential capacity it might possess. The operation I began by cutting off the nymphæ. The first one, removed by one cut of the scissors, bled from its stump at innumerable points in a manner that was almost alarming. A Pean's forceps grasped the base of the second before it was removed, and was left hanging there till the rest of the operation was completed. The next step was to turn the extroverted bladder inwards, and keep it in position by a piece of firm sponge cut to shape, and insinuated under the overlapping abdominal rim. A flap, in shape corresponding to the gap in the abdominal wall, and a little larger in size, with a small peak or projection at its upper margin, intended to be united to an opening in the upper surface of the vagina, was now dissected off the middle line, just above the tumour. Catch forceps were placed on the numerous bleeding points, and left hanging there. Starting from the middle of the incision for the abdominal flap on each side, and closely skirting the abdominal opening, two lateral flaps were now dissected up. Their bases were in the vascular and distensile tissue of the labia majora. The sponge was now removed, and the abdominal flap, turned on its face over the extroverted bladder, was accurately stitched to the raw surfaces round the abdominal opening by means of a continuous catgut suture. Two silver sutures were then carried through—first the outer portion of the lateral flaps, then the outer margins of the abdominal flap, and, lastly, the edge of the abdominal opening. When the free ends of these were pulled tight, the lateral flaps met in the middle line; and, when they were twisted over a piece of rubber tubing, abdominal wall and under and upper flaps were all kept in accurate apposition. Horsehair sutures were now inserted in the middle line between the lateral flaps; above, between the abdominal wall and the ends of these flaps; and at the sides, between the same flaps and the skin in the groin. The whole surface was covered with skin; nothing whatever was left to granulate. At this stage, after three-quarters of an hour, when I intended to finish the urethral part of the operation, the condition of the patient was so bad that I decided to do no more. A catheter was placed in the new bladder, and fixed there by strapping it to the thigh. Under boracic ointment, perfect healing, without any sloughing, took place, and the child was sent home at the end of a month.

When she had regained strength, she was readmitted, in February, 1885, to undergo a second operation. As was expected from the imperfect manner in which the lower opening had been closed, there was some retraction of the flap, and slight exposure of the extroverted mucous membrane at its lowest part when she was standing up. The labia, drawn towards the middle line, provided such a superabundance of tissue that I decided to utilise it in making a urethra instead of the vagina. Two incisions, about one-fourth of an inch apart, were made along the sides of the groove, which represented the unclosed urethra; these were carried round the small opening from which the bladder protruded. The inner margins of these incisions were united with continuous catgut suture over a catheter placed in the bladder and laid in the groove. The labia, separated for a little way on each side, were united over all with three harelip pins and two shoemaker's stitches of silk. A slight urinary fistula appeared at the upper end of the wounds, which closed in a month of its own accord; with this exception the whole united by first intention. The result has been a complete closure of the extroverted bladder, with an artificial urethra at least an inch long. The cavity is too small to permit of retention of urine for any length of time; as the patient gets older and the parts increaze in size, it is just possible that some power of retain-the urine may develop. It is not likely, however, that she will ever be able to dispense with the use of a rubber urinal, which she now wears.

This is the third case on which I have operated for extroversion of the bladder. The other two were on males,[1] and in each of these a complete success was got after one operation. The operative details were essentially identical, and need not be again dwelt upon. I would merely call attention to what I consider the most important steps in the operation; these are the manner in which the lower flap is accurately sutured to the edges of the abdominal opening, and the means of securing, by silver loops over rubber tubing, permanent and accurate apposition of flaps to each other, and to the abdominal walls at the periphery of the opening.

Clifton.

ON THE

SECONDARY NATURE OF MONOCULAR RELIEF.

BY BRIGADE SURGEON T. OUGHTON, A.M.D.

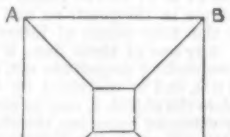
EVERY student of sensorial philosophy will admit that the subject of monocular relief is unmatched for delicacy, complication, and intelligent interest. Granting that the visual sense is comprised *in toto* of a primary sensory function, how can it possibly happen that relievo perceptions may be evolved from a single retinal plane of delineation? The perception consists of more or less coloured points that are related to each other in point of distance, some nearer and some more remote, with an unerring conformity to law and order; so much is patent to observation, whether it be a diagram, a picture, or surrounding objects that are viewed with a single eye. Carpenter has explained the process as one of constructive imagination, analogous to the faculty of novel-writing. Truly the authors of light literature may or may not arrange their incidents with consummate art and order; but, after all, their creations are mere ideations, instead of being actually objective and unmodifiable within certain limits. Again, the constructive imagination fails when a picture or diagram is viewed binocularly, notwithstanding all the elements of the imaginative construction persist as causative factors. Brewster translates the phenomenon as a mental illusion that is effected by chiaroscuro, although he does not seem to have accounted for properly shaded pictures being seen without relief by both eyes, or that the manifestation presents itself unmodified in diagrams and outline sketches (bereft of shadow) when viewed by one eye. The outstanding diffi-

[1] British Medical Journal, Feb. 7th, 1880.

culty resolves itself into a distantial perception being irreconcilable with a plane primary expansion; so insurmountable, indeed, is this logical obstacle (on the foregoing postulate) that the subject has been permitted to lapse into stagnancy, until at length we find ourselves contentedly satisfied with experience—whatever that may be—as the analytical clue to an important physiological phenomenon.

Undoubtedly many strong arguments militate against the perception of monocular distance, but the answer to such arguments, reinforced by evidence in its favour, will, I trust, clear the subject of all ambiguity. The most influential antagonistic argument is, that visible direction is a line directed endwise to the eye, and projecting but a single retinal point, whatsoever the distance of the objective may be (Berkeley, Dr. Mackenzie, &c.). This is quite true of isolated visible points, and sufficiently explains motes floating about the field of vision (apparently more numerous and isolable in advanced life) being projected indifferently on a window-sash or on the sky. It is true, likewise, of extended objects that are unknown or that are seen as blurred extensions without definition. A short time back, for example, I mistook a bird on a wall (through a single eyeglass) for a fowl on the bed of a garden beyond. It is inapplicable, however, to distinctly recognised objects subtending a visual angle, and visual perspectives usually comprise such objects. In order for the hypothesis to cover this fact, it would be indispensable that such objects should subtend a uniform visual angle at every distance, and that they do not do so is proof that an element has been introduced which may regulate distantial perception. With regard, again, to the difficulty of filling a wineglass at arm's length with the use of one eye, this does not argue the total exclusion of a distantial perception, but points merely to a defect. Thirdly, monocular vision may perceive the annexed diagram (Fig. 1) either as a concave or a convex

FIG. 1.



truncated pyramid; if the attention be fixed on one modification of relief for a short time, a sudden transformation will be effected (quite involuntarily) into the opposite relief. It may be urged that the central square being seen either nearer or more remote, suffices to disprove the operation of a distantial perception; it disproves the perception being absolute, but not that it is relational to the surrounding perspective. Thus, with the square seen in front, the base, A B C D, must be seen at a determinate distance behind it, and so, of the square itself, we shall find that its apparent distance is in conformity to natural law—that is, that it is a true perception that is subject absolutely to either of two distantial variations. Lastly, an actual objective solidity—a pentangular pyramid constructed of cardboard, or one of the shape of Fig. 1—will be found to present a similar transformation of relief when the single eye is placed immediately over the central point of the object. This results from the retinal representation being much the same for the objective as for its equivalent diagram, and subject to identical perceptive laws. It may be cursorily noticed, during the examination of the above and like diagrams, that the subrelief is invariably deeper than the alto form, whilst the circumstance will probably be interrogated no further; but I regard the phenomenon as one of intrinsic importance, and submit it as crucially testing the accuracy of any hypothesis that may be framed touching monocular relief. Certainly constructive imagination, chiaroscuro, judgment, or any other *a priori* faculty of perception, cannot be said to account for the peculiarity; indeed, the discrepancy cannot be amenable otherwise than to fixed perceptive laws of an *a posteriori* character.

Passing next to the evidence in favour of a distantial perception, let us take the facts of binocular vision first. A pure binocular muscle-perception, using this term in the same sense that the eye is said to perceive light, regulates the visible position of objects that are included within a range of some fourteen or fifteen yards;[1] still, unquestionably, a very perfect distantial perception is enjoyed of objects far exceeding such range, and extending even to the horizon. Is this an illusion? It will be found, in respect of these objects, that the optical axes are virtually parallel when viewing them, and that their retinal images will be precisely alike in the two eyes, whatsoever be the axial inclination.[2] Coincidently, likewise, there is a striking similitude between the binocular vision of such objects and monocular relief. (*a*) Natural objects are perceived with relief under both circumstances. (*b*) Plane perspectives present an equally marked relief, as in the case of a small picture viewed with one eye, or a panoramic painting viewed with both. (*c*) I find that very large diagrams similar to the above, drawn with lines one-fourth of an inch thick, present very perfect conversions of relief when viewed binocularly at a distance of fifteen yards. (*d*) A conversion of relievo forms, as noted with the cardboard pyramids already alluded to, is often seen binocularly in the globes or balls that are affixed to the walls of distant fortifications (Aguelonius). Porterfield mentions the analogous case of a distant windmill, for we sometimes mistake the course of the circular motion of its sails by confounding their nearer for their more remote ends; so that, from the present point of view, a very large fraction of the distantial field of binocular vision affords but an instance of what may be termed duplicate monocular relief. The same perceptive laws apply to either instance, and if a distantial perception be admitted in one case, it cannot be gainsaid in the other. A second remark concerning the binocular field of vision is that, consequent on the intervention of the bridge of the nose, but little more than one-half of it can be seen binocularly at a time. The oblique quarter-field on either side is a monocular visual exercise, and one is informed of the fact rather by direct experiment than from any erroneous apprehension of objective distance or relief.

Then, referring to the experience of monocular vision exclusively, no evidence would seem to be more trustworthy than that of a myopic person—that is to say, one who is constantly exercising uniocular vision through an eyeglass. Such persons not infrequently compete on even terms with successful billiard players possessed of emmetropia, which would be impossible on the theory that they could not perceive the position of the ball aimed at; neither am I aware, speaking from personal experience, that any precedent judicial function is necessary to the act of making a good stroke in the one case rather than in the other. Moreover, I have frequently examined the paraphernalia of my bedroom whilst lying in bed, both eyes have followed *seriatim* the various surroundings, and I have imagined that both were employed visually; but on closing one eye, a bordering of blanket has been found to occlude almost the entire apartment from view—possibly this perfect apprehension of monocular relief may be explained by the habitual exercise of uniocular vision. We are aware, also, that some emmetropic persons employ one eye only during vision when they fancy that both are in active use. Le Conte has laid down that the single eye judges of distance by aerial perspective, mathematical perspective, and focal perspective; these elements of judgment cannot be said to be initial by any means, and so are wide of our immediate object. The following extract, however, bears upon it:—"If we place one object before another in the median plane of sight, even when we look steadily and without change of optic convergence at the one or the other, we distinctly perceive the depth of space between them.[3] This fact, being an instance of double monocular vision, affords direct evidence in favour of the monocular perception of distance and consequent relievo.

On the foregoing premisses, therefore, a prospective *rationale* of monocular relief must include many considerations:—1. As a secondary perception it must be referable to mus-

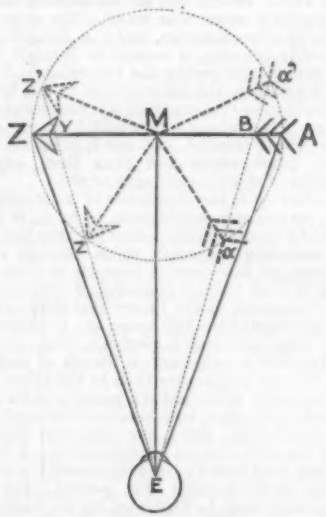
[1] Vide THE LANCET, July 12th, 1884.

[2] Reference to a stereograph might instruct us in this matter. If we measure the distance of corresponding images of various objects in a stereograph with a pair of compasses, the approximation of the images will be found correspondent to apparent proximity in the stereoscopic resultant; and, further, a uniform interval between various images will not hold excepting for objects that are beyond some forty or fifty yards distant. This is accounted for by the interval separating the cameraic focal centres considerably exceeding the interocular distance, and sufficiently explains the exaggerated relief of stereoscopic landscapes.

[3] Le Conte on Sight, p. 148, 1881.

cular agency. 2. Being a relief, it must be constituted of two extensions—namely, a larger one contained by a smaller one; neither, it may be added, can constructive imagination or chiaroscuro be involved in its production. 3. These duplicate extensions, as in the case of binocular relief, must be represented in chief by visual angles. The following original experiment is interesting as indicating that different perspectives of objects are seen during the rotation of the single eyeball. A gaslight on the right hand side, some few feet distant, is viewed directly by rotating the right eye towards the external canthus, and its apparent direction is noted by interposing the upright forefinger between it and the eye; on rotating the eyeball inwards, keeping the finger stationary, the flame will be seen to the inner side of the finger. The perspective effect is much the same as if there were two eyes an inch apart, one at either canthus; nevertheless, inasmuch as the two sensations are not simultaneous, the experiment cannot be cited as solving the problem specified. 4. No obvious inconsistency should be sanctioned between two different but strictly analogous forms of visual relief. We found that a fixed point (the binocular centre) was necessarily related to the diverse visual angles of binocular relief; so, correspondingly, the fixed point of the monocular variety will be found to be the median line of monocular vision. 5. The simplest form of relief (the diagrammatic) should be selected for research rather than the more complex forms

FIG. 2.



(pictures or actual objectives), whereby many Will-o'-the-wisps that are apt to obtrude themselves as veritable causes, such as aerial perspective, &c., will declare their true nature rather as adjuvants than excitants.

As regards the duplicate visual angles said to be indispensable, the above figure (Fig. 2) will simplify the demonstration. Z M A represents the section of a diagrammatic perspective, such as the preceding, viewed by the single eye, at E, so placed that the median line, E M, is at right angles to the plane on which Z M A is described; it has to be shown that the perspective is seen either as the dotted subrelief z M a, or as the dotted alto relief z' M a', in such manner that the former is a more marked relief than the latter (this has already been submitted as a test in accordance with experience.) In a previous article the visual angle Z E A has been referred to ocular rotations transpiring between the points Z and A, and in accordance with a hypothesis that visible direction is a muscle-perception operating on stimulated retinal points. Tracing the hypothesis still further, there are manifestly three methods of viewing such an extension as Z M A,—in other words, every visible extension originates no fewer than three visual angles: 1. Ocular rotation, giving rise to the ocular visual angle Z E A. 2. Keeping the eye fixed forwards, Z M A may be surveyed between its extremes by rotation of the head; this is a common mode of examining objects, and it effects a cranial visual angle. 3. Retaining both eye and head fixed forwards, the extension may be explored by rotation of the trunk, and the resultant would be a truncal visual angle.

Now, in respect of these visual angles, the two last-named spring from revolutions about the centre of perception, and probably from actual gyrations of a central representative organism; consequently they are of equal angular value, and may be further treated of under a common denomination (cranial angle). The value of this angle is necessarily smaller than that of the ocular visual angle, as a result of the cranial centre being some few inches behind the ocular centre; from experiments made with cardboard discs representing sections *in situ* of the cranium and the eye, I have roughly proportioned their respective values as 4 : 5. Further, both angles having reference to the centre of visible direction during monocular vision, the angle Y E B (in the diagram) will express the cranial visual angle. Speaking, then, of the central point, M, being fixed, and of any lateral point, Z, being displaced to Y, in such manner that the interval Z Y is one-fifth of the interval Z M, it may be laid down concerning monocular visible extensions on a plane of perspective as follows: Lateral visible points suffer a visual displacement in the direct ratio of their distance from the median visible direction. It should be added that a similar angular disparity is maintained between the eye and head in their upward and downward, or even oblique movements, so that the rule just quoted may be regarded as being applicable to all peripheral retinal images in their relation to the porus opticus (the point of sight in perspective).

An objection will hold to the demonstration thus far—namely, that a given lateral object, Z, cannot be seen along two visible directions, E Z and E Y, without an apparent overlapping and confused vision. The same line of argument has been extended to binocular vision as indicating the necessity of a universal double vision; in both cases, however, visual displacement is an instrument of perceptive relievo. From M, as a centre, with the radius M Z, describe the dotted circle $z z' a' a$; let the visible directions, E Y and E B, enter the circle in the points $z z'$ and $a a'$ respectively; and join M to the four points of intersection by dotted straight lines. Any one of these lines, M z', accurately expresses the corresponding magnitude M Z, equivalent to the ocular angle Z E M, and is contained by the cranial angle Y E M. Wherefore the object, Z, may be seen indifferently at z or z'; also, by extended reasoning, the object Z M A may be seen indifferently either as the subrelief z M a or as the alto relief z' M a', whereof the former is expressible as a more pronounced relievo than the latter. Moreover, providing adequate modifying influences be brought to bear on the objective, no ostensible objection can be offered why Z M A should not appear as a continuous relief z M a', or as a continuous relief z' M a (in horizontal section). So that monocular relief, on the foregoing analysis, can be none other than a secondary perception.

(To be concluded.)

SUBSTITUTES FOR COCAINE.

BY PROSSER JAMES, M.D.,
LECTURER ON MATERIA MEDICA AND THERAPEUTICS AT THE LONDON HOSPITAL.

No. I.

IN a letter to THE LANCET last November I mentioned that I had experimented with other alkaloids as substitutes for cocaine, or, as it may preferably be called, following Sir Robt. Christison, cucaine. It was natural at once to turn to caffeine as the most promising substance. This alkaloid, however, is difficult to manage. It is very insoluble, and very refractory to many reagents. I boiled specimen after specimen in hydrochloric acid without obtaining a combination. On evaporating, the well-washed crystals appeared unchanged, and yielded no reaction to the tests for a chloride. The ordinary citrate of caffeine in the market is not a true salt, but an indefinite mixture, and of course, therefore, ill-adapted for the proposed experiments. Acetate of caffeine seems to be more readily formed, but is unstable, the volatile acid being soon dissipated. I therefore proceeded to make double salts with soda as the additional base, and found myself in possession of some very manageable preparations. Accidentally I first made salicylate of

caffeine and soda, and found it possess in some degree the property sought. Though not very soluble in cold water, it is at once taken up on applying heat, and the solution remains clear on cooling. A solution of 1 of the sodio-salicylate in 2 of water may thus be obtained, which will contain 62½ per cent. of the alkaloid. Sodio-cinnamate gives the same results. Sodio-benzoate gives a similar solution, but is rather weaker of alkaloid, containing only 50 per cent.

I have chiefly used the salicylate and benzoate salts. They are of considerable value, and in some cases may replace the much more costly cucaine. Applied locally to mucous membranes, these solutions deaden sensation, diminish pain, blunt the perception of tactile, thermal, and dolorous impressions; but they have not at present given me so powerful and rapid anæsthetic influence as cucaine. I have, however, employed them largely in the pharynx and larynx; I have also resorted to them over twenty times in operating for nasal polypi. In some of these they have been quite successful, but in others less satisfactory, possibly from imperfect application.

The following experiments may interest:—On Dec. 6th, 1884, a medical man with a very sensitive urethra, the passage of a sound always giving much pain, agreed to try a solution suggested to him, containing 25 per cent. of sodio-salicylate. He reported that it entirely prevented the instrument from hurting him.

A stable solution is well adapted for hypodermic use. To determine the effect I tried this method on myself. On Dec. 8th at 9.30 A.M., the pulse being 80 and the temperature (sublingual) 98·6°, I injected four minims of a saturated solution, not deeply, but near the skin, to observe the local effect. It caused some pain, and a hard lump soon appeared, such as is often seen, three-quarters of an inch by an inch and an eighth. At 10.15 A.M. the pulse was 90 and the temperature 98·8°, with a good deal of darting pain. The swelling pitted on pressure, but was insensitive. At 10.30 A.M. the pulse was 90 and the temperature 99·4°; locally the same; some uneasiness at præcordia. At 11 A.M. the same, but locally more insensitive. At 11.30 A.M. the same, but the uneasiness at the præcordia had increased gradually. It was troublesome up to 12.30 P.M., when the local pain had nearly ceased, and the swelling had diminished to half its thickness; temperature 99·2°. By 2 P.M. the swelling had diminished to one quarter of its size. At 11 P.M. the induration and pitting were still marked; no other symptom; temperature 99·2°. The next morning there was only a slight mark; pulse 80; temperature 98°. No doubt this solution was rather too strong for hypodermic use.

In the eye the sodio-salicylate, except in weak solutions, causes irritation and even pain. Those who have the opportunity will perhaps try weak solutions, with a view to determine its effect.

Dean-street, Park-lane, W.

COEXISTENCE OF A URIC-ACID AND A URATE OF AMMONIA STONE IN THE SAME BLADDER; LITHOLAPAXY AND RECOVERY.

BY ALAN REEVE MANBY, M.R.C.S.

THE recent publication in THE LANCET of cases of lithotrity by Bigelow's method induces me to send the following notes of a case, treated by inexperienced country surgeons in a cottage, with a short abstract of the remarks read with it at the last meeting of the Norwich Medico-Chirurgical Society.

Robert P——, aged sixty-six, a burly blacksmith, whose grandfather, uncle, and at least one nephew were the victims of stone in the bladder, had himself suffered from "gravel" for thirty-eight years, and had for the last year or two suffered such intolerable agony in the hypogastrium that his life was a burden and working at his trade an impossiblity. Three years ago I sounded him and found a stone, but failed to persuade him to undergo any operation.

Oct. 19th, 1884.—I again sounded him and found easily a stone, which appeared to be lying to the right side of the bladder, and to be large, smooth, and round. The urine was, and the bladder appeared to be, healthy. A uric-acid calculus was diagnosed by my assistant, Mr. Herbert Rowell, and myself. It is worthy of note that the patient had never passed blood from the urethra, nor had he had any arrest of his water-stream during micturition. His chief miseries were the frequent calls to void, both by day and night, only a few drops of urine, and the agony caused by sudden movements and stooping at his trade. We had no difficulty now in persuading him to submit to anything for his relief, "provided he did not leave his home;" so, Mr. Morse of Norwich having lent us his valuable instruments and more valuable assistance, on Oct. 22nd, 1884, Mr. Rowell anæsthetised the patient with the A.C.E. mixture, and I easily seized and crushed with a Thompson's lithotrite a stone measuring apparently 1¼ in. in its longitudinal by one inch in its transverse diameters. This process I repeated with the fragments again and again, Mr. Rowell and Mr. Morse taking turns, till no piece of any size could be caught. The lithotrite was easily withdrawn until it reached the meatus, but being pretty full of putty-like débris, some force would have been required to remove it entirely; the orifice was, therefore, incised at once and the instrument withdrawn. A Bigelow's straight tube (No. 18 English) was then passed into the bladder, the exhaust-bottle applied, and 201 grains (when dry) of uric-acid detritus evacuated. The sitting had now occupied seventy-five minutes, and Mr. Morse had to leave; so, although we could feel on sounding what appeared to us might be a large fragment of the stone still in the bladder, we desisted for the day, removed the patient to a warm bed, and gave him a dose of salicylate of soda, &c., every three or four hours, with instructions to keep fomentations as hot as he could bear them over and around the pubes.—23rd: The patient has had no bad symptoms and has not passed any fragments. The swelling, &c., of the urethra having subsided, we sounded him and found what appeared to be another large round and smooth stone.

Nov. 5th.—The patient having completely recovered from the former operation, Mr. Rowell again anæsthetised him, and I attempted to seize the stone, which could be felt apparently riding above the male blade of the lithotrite, and jamming between it and the pubes. On opening the instrument, no manœuvring, such as turning the lithotrite, raising the patient, &c., succeeded in dislodging it. I therefore withdrew the lithotrite, passed the No. 18 tube, and with the evacuator filled the bladder with warm water. After which Mr. Rowell caught a large stone, and with some effort crushed it. We repeated the process on the fragments by turns till his hand was blistered and I was tired. Gaining confidence as we progressed, the lithotrite was exchanged for the evacuator two or three times, till no stone could be felt and no débris passed into the bulb. This sitting lasted more than ninety minutes, and the patient inhaled six ounces of A. C. E. and half an ounce of pure chloroform. Similar precautions were adopted as on the first occasion, and a third of a grain of morphia was given hypodermically at bedtime. No fragments or débris of any kind were passed after the removal of the evacuating catheter, and the patient recovered rapidly and completely. The detritus, when dry, weighed 570 grains, and consisted chiefly of urate of ammonia, making, with the first débris, a total of 771 grains removed at the two sittings.

Remarks.—It may be objected that this was not a successful litholapaxy, but the fragments prove most conclusively that each sitting was in itself a perfect example of lithotrity by Bigelow's method. Each operation evacuated—and evacuated wholly and entirely—its own particular stone, not the smallest fragment of the uric-acid calculus being passed after the first crushing, nor the tiniest mite of the urate of ammonia after the second. The contrast in appearance between the two stones was great; the uric-acid one showed sharp angular fragments of a bright-salmon colour, while the other was of a softer texture and a pale-slate colour. And although undoubtedly we ought to have broken and got rid of both at one time, I do not regret that we did not, as had we done so we could not have known that more than one stone existed, and from the apparent size of that one an erroneous impulse might have been given in the direction of the crushing of the largest stones. For, together, the dimensions of our stones were almost the largest, and the duration of the sittings the longest I could find recorded till the publication of the grand series of cases treated by Surgeon-Major Freyer in the issues of THE LANCET of February 28th and March 7th and 14th. The coexistence of stones of different composition in the same bladder is of interest. Mr. Cadge in the discussion stated "that although it is very common to see calculi with alternate layers of various kinds, it is very unusual to see, as in this instance, two stones different in colour and of

different, if allied, composition side by side in one bladder;" and he suggested, in explanation, "that in all probability, after one stone had developed, a slight change in diathesis occurred, and a fresh nucleus of another kind had descended from the kidney and grew also," and he mentioned "that on several occasions, during lithotomy, he had found a large and a very small stone together, and during lithotrity by the old method the patient would have a distinct attack of renal colic and discharge an entire stone."

East Rudham, Norfolk.

A CASE OF LANDRY'S PARALYSIS.

BY W. E. BUCK, M.A., M.D. CANTAB.,
PHYSICIAN TO THE LEICESTER INFIRMARY.

I VENTURE to publish the following scanty notes of a case which I believe to be one of acute ascending paralysis, as first described by Landry in 1869. I desire to direct attention to it as a disease which is by no means easy to diagnose, and which sometimes is rapidly fatal. This paralysis has not, till recently, been noticed in the larger text-books on medicine, and very little is known about its etiology, and absolutely nothing about its pathology. Dr. Bristowe says that no morbid changes have been discovered which can account for the symptoms, and that in many cases the cord has been found apparently in quite a healthy state. These statements are confirmed by most other writers on the subject.

"Dec. 3rd.—Miss R——, aged twenty, seamstress, says she has been feeling poorly for three weeks, and got her feet wet on Dec. 1st. She complains of a feeling of pins and needles, and want of power in the hands and feet. She walks lame, and cannot hold a cup or thread a needle. There is no swelling, redness, or tenderness. She says she does not feel ill.—4th: The patient developed a clicking in the throat last night; she had a good night, but cannot raise herself in bed nor stand this morning. Temperature normal. I was called to see her this evening, and went at 7.45. I found her much altered in appearance; complexion waxy, but not altogether pallid; a tinge of blueness round the lips. She was propped up high in bed. There was a continued rattling of mucus in the trachea, and an inability to speak loudly; there was also a feeling of choking and difficulty in swallowing, although she could swallow small quantities at a time. Bowels open several times. Pulse feeble, and feeling as if it might soon cease. At 9.30 she died without a struggle."

These notes were kindly given to me by Dr. Cox-Hippisley, Miss R——'s medical attendant. When he called me in to see her about an hour before her death she was propped up in bed and answered my questions rationally. She could not move her legs or her fingers, but could move her arms slightly. There was no ankle clonus, but I did not test for other reflexes. Her breathing was feeble and shallow, with a slight rattling of mucus in the trachea and bronchi. There were no other physical signs. Heart sounds normal, but feeble. No trouble as regarded bladder or rectum. Tongue clean; pupils dilated. Temperature normal; pulse normal, but feeble. She died apparently from some pressure or interference with the nuclei of the pneumogastric nerves—in fact, from bulbar paralysis.

I obtained permission to examine the body, and made the necropsy about forty hours after death. The body was exceedingly well nourished and well formed. Heart, lungs, stomach, and liver normal. The kidneys had the capsules thickened and were slightly contracted. The spinal cord was removed and hardened for microscopical examination, but nothing abnormal could be detected. This disease is mainly characterised by negatives in regard both to diagnosis and pathology. It is generally fatal, and may be of very short duration. In this case the patient did her work to within three days of her death, and even went to the theatre on the third evening before she died. The symptoms were in accordance with those usually described, except in one particular—viz., that she did not notice the loss of power first in the lower extremities and then gradually ascending. Dr. Bristowe, however, remarks, in the fifth edition of his "Theory and Practice of Medicine," that in some rare cases the paralysis takes a descending course, beginning above and involving the lower extremities last. This disease is not at all common, and the literature relating to it is so recent and scanty that I fancy it is not at all well known to the general profession; for these reasons I have thus briefly described this case, in the hope that more attention may be devoted to it.

Leicester.

NOTE ON THE TREATMENT BY SECTION OF HYDROCELE BY THE ANTISEPTIC METHOD.

BY EDWARD BELLAMY, F.R.C.S.,
FELLOW OF KING'S COLLEGE, SURGEON TO THE CHARING-CROSS HOSPITAL, EXAMINER IN SURGERY IN THE VICTORIA UNIVERSITY, MANCHESTER.

THE few remarks I make are based upon the results of a considerable number of cases I have treated, both in hospital and in private practice, in the early and later stages of hydrocele, by which latter I mean those which have been repeatedly tapped and in most instances injected. It is hardly necessary to take up space by instancing the individual cases. It is certainly time that the old-fashioned method of tapping and the supposed radical cure by continuous injection was done away with, as painful, dilatory, and generally useless. I claim no originality whatever in this treatment. I desire to call the attention of practitioners to the fact that they should invariably adopt the method of free incision with strict antiseptic precautions, and I cannot understand why it is not more universally carried out. Every surgeon knows of the method, but, as far as I see, contents himself with adhering to the usual proceedings. There is no danger in it. An anæsthetic can be given if necessary, the healing is rapid, the cure almost certain, if not absolutely so. The operation is as follows. The diagnosis of course being established, the scrotum should be shaved, and (if the surgeon thinks necessary) the spray used, the tumour is firmly grasped so as to render the parts as tense as possible. A clean sweep through all the scrotal tissues is then made with the bistoury from the cord to the base, and the fluid escapes. Every bleeding vessel, however small, must be twisted or tied most scrupulously, and the interior of the sac carefully examined for any vessel which may have been wounded or have given way. The cavity should then, not too tensely, be stuffed with either lint soaked in 1 in 40 carbolised oil or gauze, and the upper part of the edges of the wound stitched together, including all tissues—I do not see any advantage in stitching the cut edges of the sac to the sides of the wound,—a small tag of the contents being left out of the most dependent part on the contingency of drainage, a pad of salicylic wool placed over all, and the scrotum supported by a cushion between the thighs. In a couple of days the parts may be dressed (under spray, if thought desirable) and the contents of the sac withdrawn. As a rule considerable contraction of the walls of the sac will have set in, but it is advisable to still introduce the antiseptic material so long as any appreciable cavity exists, and this is generally for about a week in very favourable cases, when it will be found impossible to pass anything into it, and merely the lips of the original wound are left to close. Tubal drainage is, I venture to think, unnecessary. I have not yet met with any untoward constitutional symptoms by adopting this method, which is equally applicable to encysted hydrocele of the cord.

Wimpole-street, W.

A REMARKABLE CASE.

BY JAMES H. AVELING, M.D.,
SENIOR PHYSICIAN TO THE CHELSEA HOSPITAL FOR WOMEN.

THE patient whose case is here briefly narrated is a married lady aged thirty-eight, with a family. She is very intelligent, and has no history of hysteria or other nervous disorders. In October, 1884, one of her children struck her left eye with the back of his head. Six weeks after she felt something wrong with the eye. She also had noises in the ears, and tenderness of the nose, and pain at the back of the head when she stooped or had the bowels moved. Her speech also was affected. She hesitated and stammered when she spoke. These symptoms lasted and gradually got

worse from December, 1884, to March, 1885, when she had three blisters on the back of her neck. The pain in the head now became constant, and caused sickness. During these three months the patient, besides her own medical man, had the advantage of receiving the advice of the following eminent members of our profession:—Mr. McHardy, Mr. Couper, Mr. Hulke, Dr. Morell Mackenzie, Mr. Power, Mr. Cumberbatch, and Dr. Ferrier.

On March 22nd the patient spoke to her medical attendant, Mr. Robert Mathews, of other symptoms which she had felt for a long time, but which she had not mentioned because she thought they could not have anything to do with her head troubles. She then described herself as having a constant feeling of weight in the pelvis, as if something were coming down, and that she could only pass a small quantity of water at a time with great effort. This statement induced Mr. Mathews to make an examination, when he found "extreme anteversion of the uterus, with a full bladder, the fundus of the uterus resting on, and making as it were a bed for itself in, the bladder." He replaced the uterus, emptied the bladder, and, to his surprise, all the head symptoms disappeared. The relief, however, was only temporary, for the symptoms returned when the uterus fell forwards into its abnormal position. At the suggestion of her husband, she tried the plan of lying with her hips raised on a high pillow, and when in this posture the head symptoms were relieved.

In April Mr. Mathews asked me to see the case, with the view of mechanically rectifying the position of the uterus. I found laceration of the perineum and os uteri, the latter being sufficiently patulous to admit the tip of the index finger. The uterus was large and congested, low down in the pelvis, and acutely anteverted, its fundus pressing on the neck of the bladder.

April 20th.—The patient having come to London I replaced the uterus and retained it in position by one of Dr. Graily Hewitt's cradle pessaries. When I visited her the next day I found all the head symptoms gone. Eye, ear, nose, and head were perfectly well and the speech free from hesitation or stammering. The only trouble left was vesical, and this was due to the pessary which did not quite fit. After trying one of Thomas's anteversion pessaries without success, I introduced a smaller cradle pessary, and no further trouble with the bladder has been experienced.

The patient returned home, and on June 3rd I heard from her. She wrote, "I am quite comfortable and perfectly free from any kind of pain."

Upper Wimpole-street, Cavendish-square, W.

TWO CASES OF TRAUMATIC GANGRENE OF THE LEG; AMPUTATION.

BY D. CHARLES DAVIDSON, L.M.D.,
ACTING HEALTH OFFICER, BOMBAY.

WHILE stationed at Belgaum in 1878, Dr. Peters, civil surgeon, asked me to see with him, in the Civil Hospital, a case of fracture of the tibia and fibula, complicated with wound of the soft parts, but not constituting a compound fracture, in which gangrene had supervened. We found the man in a high state of fever; the foot, and a considerable portion of the leg, which had been fractured at the lower margin of the middle third, black, covered with phlyctenæ, and emitting an offensive odour. The gangrene was rapidly spreading; the thigh very much swollen, and deeply infiltrated.

As Dr. Peters was leaving the station, and as the case would thus have come under my care in a few days, he kindly asked me to operate. The leg was amputated immediately above the knee-joint, the obtaining of good flaps being sacrificed to a wish to remove as small a portion of the femur as possible, and thus afford the patient the best chance of recovery. The man bore the operation fairly well, lost little blood, and passed a tolerably good night, with the exception of infiltration of the thigh with pus, which had to be evacuated by means of free incisions. The patient went on gaining strength without a bad symptom. The flaps, however, sloughed, and a portion of the femur had subsequently to be removed. The man did well.

In February of last year, while in charge of the Surat Civil Hospital, a police sepoy was admitted under my care, complaining of a badly swollen foot. He stated that on the day previous to his admission into hospital he had been attached to a shooting party, and had injured his foot with a thorn in getting through a prickly pear hedge. On examination the foot was found swollen, hot, and tender; bu ino foreign body could be detected. The man was feverish, with hot dry skin and considerable thirst. He was put to bed and warm moist applications applied. I visited him some time afterwards, and found the swelling increased, the skin of a mottled hue, circulation much impeded, and sensation nearly gone. A free incision was made, a quantity of watery serum evacuated, large poultices applied, and the whole wrapped up in a layer of cotton-wool. I saw him again in the evening, and found the part up to the middle of the leg cold, pulseless, and entirely without sensation, and the greater portion of the foot black and covered with phlyctenæ. As mortification was rapidly spreading, amputation was decided upon, with the kind assistance of Dr. Jones, of the 10th Regiment, Native Infantry, who concurred with me as to its necessity. The leg was amputated immediately above the knee-joint. The man bore the operation well, the pulse keeping up, and little blood being lost. He, however, died on the following morning, about twelve hours after the operation.

Bombay.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum propriis collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

DISEASE OF THE KNEE-JOINTS (OSTEO-ARTHRITIS) WITH VARIOUS NERVOUS SYMPTOMS; REMARKS.

(Under the care of Mr. MORRANT BAKER.)

OUR readers will recollect the discussion on joint disease in connexion with locomotor ataxy which was opened by Mr. Morrant Baker on November 14th of last year at the Clinical Society. The following case forms an important addition to the literature on the subject. It is difficult to give the relationship between the disease of the joint and the neurotic changes which had probably commenced before the injury to which the joint had been exposed. No nerve symptoms appear to have been noticed by the patient.

For the notes of the following case we are indebted to Mr. J. N. Vogan, late house-surgeon.

J. R——, a man aged forty-two, was admitted into Darker ward, under the care of Mr. Baker, on Feb. 15th, 1885, suffering from disease of both knee-joints. Patient looks a fairly healthy man, and is well-nourished. He states that up to within three years and a half ago he was quite well, with the exception of a few rheumatic pains in damp weather. Then, while he was at work, he slipped off a step, fell, and twisted his leg under him, severely spraining it. It swelled up very soon after the accident, and caused him much pain. He was admitted into the Northampton Hospital for it, and was under treatment there for five weeks. It was painted and strapped. It got a little better, but it has never been right since. When in the Northampton Hospital his right knee became enlarged and painful, but it was not treated. Since then both knees have been getting gradually worse. After a day's work they become much enlarged and very painful, so that lately he has been unable to continue his work regularly. A fortnight ago he walked up to London to seek advice. He walked about eight miles a day, and at the end of each day his knees were very painful indeed, keeping him awake at night. When he arrived in town he came to this hospital, and was admitted. When young he was in the army. He left twelve years ago. He had gonorrhœa when twenty years of age. Thirteen years ago he had rheumatic fever very severely. He was laid up with it for thirteen weeks in the Bermuda Hospital. He says he was much reduced in health afterwards. The family history is good. His father lived to seventy-two,

and his mother to seventy-three. His mother suffered very much from rheumatism; no history of insanity or epilepsy. He presents the following condition: Both knee-joints present remarkable enlargement of the articular ends of the bones, especially on their inner sides, where the internal condyles of both femora and the internal tuberosities of both tibiæ are very prominent. The trochlear surfaces of the femora seem expanded from side to side, and both condyles of each femur seem misshapen and increased in size by the accumulation of bony structure at the edges of their articular surfaces, after the manner of lipping from osteophytic increase. The left popliteal space contains a hard mass of new bone growing either from the head of the tibia or else from its external tuberosity; and there is another mass on the outer and back part of this joint under the tendon of the biceps, and close to the external condyle of the femur. The increase of bone on the inner sides of the joints is partly attached to the tibiæ and partly to the femora, as can easily be demonstrated by making the patient flex the joints and extend them, when a distinct groove may be seen dividing the masses on either side into two nearly equal parts. The left knee-joint presents the above-described features in the most marked and advanced condition. The shafts of the tibiæ incline inwards from the knee, and as he walks the deformity is at once apparent. Both joints, when flexed and extended, communicate to the hand placed on them a well-marked sensation of crepitus. The movements of the left leg are more restricted than those of the right; the left leg can only be flexed to an angle of about 130°, while the right can be moved to a right angle, but no further. There is not much unnatural excess of lateral movement. There is total loss of patellar-tendon reflexes, and there is no ankle clonus. Eyes (examined by Mr. Vernon): Both pupils are rather sluggish, and the left is decidedly larger than the right. Neither pupil contracts to light; the right contracts to accommodation, the left uncertainly. Vision good, far and near, colour sense and field of vision normal. Slight optic neuritis in both eyes. Patient complains of knife-like cutting pains in both thighs and legs, shooting downwards. They trouble him most at night, and often keep him awake. He can balance himself perfectly in the erect position when his feet are placed together and his eyes are shut, though he feels uncertain in his gait when in the dark. His feet feel numb, more especially at certain times, as when standing and when in bed. There is no history of digestive disturbances. The left thumb presents a peculiar condition, resulting from an old dislocation of the distal phalanx, which overlaps on the dorsum of the second phalanx. Partial absorption of each adjacent surface has taken place, forming a false joint. It was produced by a blow with a piece of wood. It is now nearly stiff and painful. He has no spermatorrhœa or loss of sexual desire. His general health seems fairly good. Temperature is normal; bowels regular; appetite good; urine normal.

Feb. 24th.—Patient says he has felt much better during the last two or three days. Resting in bed has greatly relieved the pain in his knees, and he has had far less pain and numbness in his feet and thighs. He eats and sleeps well.

March 3rd.—Patient continues to improve as regards freedom from pain and general health under continued rest and general treatment.

10th.—Patient gets up of an evening; he is feeling better. The knees soon show signs of weakness if he walks much on them, especially the left, which also shows more lateral movement than the right, and more advanced disorganisation. Temperature normal.

April 10th.—The patient is improving. A leather splint with iron supports has been got for him. It is comfortable, and enables him to walk with much greater comfort.

Remarks by MR. MORRANT BAKER.—This case is of great interest in connexion with the relationship between osteo-arthritis and locomotor ataxy, and that of both these diseases with Charcot's disease of the joints. The local symptoms in this patient were absolutely indistinguishable from those of osteo-arthritis; and as far as it is possible to draw any distinction between this disease and Charcot's disease the case might be quoted as a typical example, illustrating the differences which exist between them. But on examination it was found, as the notes relate, that the patient, though not ataxic in the ordinary sense, presented in a marked degree many of the leading symptoms of tabes dorsalis—the lightning pains, the absence of patellar-tendon reflex, and the Argyll-Robertson phenomena. Too much stress must not be laid on any one case, but it suggests at least the importance of careful inquiry regarding symptoms of nerve or other lesions in all cases of chronic rheumatic arthritis, as in this way only can sufficient facts be accumulated on which to found any satisfactory theory regarding the relationship of the different diseases just mentioned.

LIVERPOOL ROYAL INFIRMARY.

VILLOUS PAPILLOMATA OF THE BLADDER; OPERATION FOR REMOVAL; DEATH; NECROPSY; REMARKS.

(Under the care of MR. REGINALD HARRISON.)

VILLOUS growths of the bladder are the most common of the simple growths of that viscus, and are usually found in the region of the trigone. From their position they frequently cause obstruction of the ureters, and death in the following case was due to an acute pyelitis following on chronic disease.

We are indebted to Mr. Garth for the notes of this case.

John A——, aged thirty-six, married, was admitted into the Royal Infirmary for a tumour of the bladder on April 30th, 1885. The chief points in the history were as follows:—Sixteen years previously he first passed a little blood when voiding urine; this symptom was frequently repeated at varying intervals up to the present day. At times the loss of blood in this manner had been very considerable; he described it as "flooding." Five years ago he appears to have passed a number of small calculi. Three years ago he had both breasts removed, within a month from each other, for what was believed to be malignant disease. Recently he had been under treatment for his bladder symptoms. The patient was admitted into the infirmary with the view of undergoing an operation, all other treatment having been tried and proving ineffectual. The patient was a good deal blanched. The scars marking the removal of the breasts were soft, and there were no signs of further growth here. There were no enlarged glands in the axillæ. The bladder was distended with most offensive urine, largely mixed with blood and clots. On introducing a long sound, the growth could be distinctly felt. On May 1st Mr. Harrison performed median perineal urethrotomy, and removed, by forceps, the scoop, and the finger, without difficulty or much hæmorrhage, masses of growth, looking like a cauliflower excrescence, which would about fill a large wineglass. It was found impossible to make anything like a clean removal of this growth, as it seemed to fill up the whole of the floor of the bladder. A tube was introduced for drainage; this, however, had to be removed, as it became choked with small portions of the growth. The patient did well until the evening of May 6th; the urine ran off freely by the wound, it lost its horrible smell, and became almost clear. In these respects the patient obtained much relief. On the evening of the 6th he began to hiccough and to vomit a dark-brownish matter; these untoward symptoms continued until the evening of the 9th, when he died.

The chief points shown by the post-mortem examination were these: Pyelitis of both kidneys, with largely dilated pelves. The ureters were both greatly dilated, and looked more like, from their size, portions of a child's small intestines. There were no calculi either in the kidneys or ureters. The bladder was dilated and thickened; occupying the opening of both ureters were the stumps of what had been two large papillomatous growths, the right had probably been about as large as a hen's egg, the left was somewhat smaller. What remained unremoved of the growths in the bladder was in a semi-sloughy condition. The operation wound was in every respect satisfactory.

Remarks by MR. HARRISON.—It is most important that all cases of operation for the removal of bladder tumours should be carefully recorded; it is only by so doing that conclusions can be arrived at as to the value of this method of treatment and the kind of cases to which it is applicable. In the present instance there was no other course open than to endeavour to give the patient relief in the manner that was decided upon. In about a week marked relief followed upon what had been done without difficulty. Unfortunately, pyelitis ensued, and was the immediate cause of death. I cannot disconnect the pyelitis from the sloughy condition of the stumps of the tumours. I regret that I had not the means of cleanly removing growths of this kind with the ligature and

scissors, and thus minimising a fruitful cause of pyelitis and of danger in operations of this kind. The previous removal of both of the patient's breasts for malignant disease was an important point as well as an unusual feature in this case. I cannot help thinking that in a cancerous subject, as this patient clearly was, the passage of calculi into the bladder, and their possible retention, might have proved a source of local irritation, and led to the development of these growths, in the same way as epithelioma of the lip and of the scrotum is frequently preceded by known causes of irritation in these localities.

ANCOATS HOSPITAL, MANCHESTER.

ANKYLOSIS OF HIP IN FAULTY POSITION; OSTEOTOMY; RECOVERY WITH PERFECT USE OF LIMB; REMARKS.

(Under the care of Mr. E. STANMORE BISHOP.)

THIS case of osteotomy is an example of the excellent results of that operation in cases of hip ankylosis, the patient having now a useful limb instead of a useless encumbrance, and being able to get about without crutches.

For the following notes we are indebted to Mr. G. A. Bolton, M.A., M.B., senior house-surgeon.

K. B——, aged ten, female, admitted on Oct. 28th, 1884, from St. Joseph's Industrial School, Victoria-park. Not much is known of this patient's previous history, she having been rescued by the school authorities in a miserable state in one of the slums of Liverpool; but it is believed that owing to the ill-treatment of her parents hip disease was produced, the mischief being begun in and mainly restricted to the femur. Scars of old sinuses are seen on the outer and upper aspect of the thigh, and the leg is five to six inches shorter than the other when placed in the same position. Present condition: Pale, strumous child; no enlarged glands in neck; very thin; but the matron of the school declares that she is much heavier and stronger than when admitted, and is now in very fair condition. The joint affected is flexed almost to a right angle with the hip, and strongly adducted. The knee lies over the thigh of the opposite side a little above the middle. It is immovable; but the adductor longus is so very tense that it is doubtful how much is due to bony ankylosis and spastic contraction of muscles, and how much to muscular tension. Chloroform, however, although the tendon appears slightly less tight, gives no increase in the mobility of the limb. The trochanter major is nearer the anterior superior spine than on the other side and higher—i.e., nearer the iliac crest, as measured by Bryant's triangle. The movements are so slight that it is impossible with the general thickening around the joint to make out whether much, if any, of the femoral head remains. Of the contracted muscles around the joint the adductor longus is most prominent, then the tensor vaginæ femoris, and the rectus. The ilio-psoas does not appear to be greatly affected, as the limb is not everted to any extent. She bears the requisite manipulations very well, and does not complain of consequent aching in or about the joint.

In spite of the matron's opinion, it was decided to leave operation for the present, and put the child upon compound phosphate of iron syrup two drachms three times a day.

On Dec. 29th, the child being much improved, and chloroform having been given, the tensor vaginæ and adductor longus were divided subcutaneously just below their origins. The leg not coming down much, the reflected tendon of the rectus was cut through, but no great result appeared to be produced. A fair amount of ecchymosis was seen, which gradually disappeared, and no bad result followed this preliminary operation.

Jan. 10th, 1885.—All discolouration having disappeared, the patient was again chloroformed for the purpose of osteotomising the neck of the femur. Under carbolic spray an incision was made an inch in length, immediately above and to the back part of the great trochanter, straight down to the bone, and in a line with what might be supposed to be the neck. The osteotome was then carried down, turned a quarter of a circle, and the bone beneath cut through without any difficulty. On removal of the osteotome, efforts to straighten the limb succeeded to some extent, but not entirely; and to render this more perfect, a thin wedge, with a base of one-sixth of an inch in width, was removed, the thin end of the wedge being directed downwards and inwards. The leg could now be straightened in the lateral direction, but it still appeared rather more flexed than natural, any attempts to bring it down below 20° producing lordosis. The patient was returned to bed, the wound syringed out with a solution of Zn Cl_2 H, dressed with sublimate dressings, and a drainage-tube inserted. A weight of 4 lb. was attached to the leg above the knee, and the foot of the bed raised. Temperature at 9 P.M., 99°.

13th.—Considerable oozing of blood and serum followed the operation, necessitating dressing to-day. Wound very healthy, no pus. Temperature, which went up to 99·8° last night, is 98° this morning.

16th.—Wound dressed; no pain; moderate discharge of pus, apparently from the granulating surface, not from the bone. Child doing well; sleeps and eats well. Temperature 98°.

18th.—Drainage-tube removed; wound contracting.

23rd.—The limb can now be brought perfectly straight; there is no pain, and the wound healthy; slight discharge of pus; shortening, apparently none. Bryant's splint applied.

26th.—Wound dressed; granulations rather free; touched with nitrate of silver.

Feb. 4th.—General health good; slight discharge of pus still from the wound, which has a slight slough in the centre. The skin has given way above the heel, owing to the pressure of the extension apparatus; resulting ulcer is dressed with zinc ointment.

10th.—Wound still rather sloughy. The ulcer at the heel has spread to a small extent; Bryant's splint removed and Thomas's applied.

14th.—Owing to the ulcer over the tendo Achillis all splints are left off, and the child merely lifted out of bed to a couch and back.

26th.—Wound contracting and becoming covered by epithelium; the ulcer on the leg rapidly cicatrising. A small superficial abscess formed in the fold of the groin, which was opened on the 24th; general health good.

27th.—Sent to convalescent home at Cheadle.

May 8th.—Has returned. There are two small raw surfaces in the sites of the osteotomy wound and that of the small abscess, but no prominent granulations, and are slowly healing. These were healed by the 12th. The delay appears to be due to the scrofulous temperament of the child. The limb is shorter by two inches than its fellow, but is in a perfectly straight line with it. The muscles are becoming more developed. She can raise the femur to an angle of 55° with the trunk, can walk fairly well, but is prevented from doing much by the want of a proper boot, which is to be made for her.

Remarks by Mr. BISHOP.—The division of the muscles in the preliminary operation were rather freer than usual, but no bad result appeared to have been produced. As, of course, ankylosis in a good position was the object aimed at, and the only one apparently attainable in this case; the resulting want of power in the muscles was of no great consequence. Progression will be attainable by movements in the lumbar region, as is already the case. The impossibility of bringing down the thigh to a straight line with the trunk was easily overcome during the first few days after the operation by steady extension, and was, I imagine, simply due to the rigidity of the ligaments kept for so long in an abnormal position. Mr. Bryant's splint was extremely useful. It is to be regretted that we were not able to use it from the first. That the limb on the 23rd, twelve days after the operation, was the same length as the other gave me some uneasiness, as I feared that the extension used had so separated the cut surface of bone that there would result a flail-like condition of the limb. No such untoward result followed, however, the bones uniting firmly and well in the new position, and the limb becoming gradually shorter until it reached two inches, at which point it has remained for three months.

JAMSETJEE JEJEEBHOY HOSPITAL, BOMBAY.

TWO CASES OF NEPHROLITHOTOMY; OPERATION; CURE; REMARKS.

(Under the care of Surgeon HATCH, M.B.)

A MUSSULMAN boy aged ten was admitted in 1883 into the Jamsetjee Jejeebhoy Hospital with fever and swelling in the left lumbar region, hot, painful, and fluctuating. This was opened and a quantity of pus removed; pus appeared also in the urine. The cavity gradually contracted, but a small sinus remained open. On passing a probe into this, a calculus was felt; and a few days later the opening was enlarged and a

stone weighing seventy-six grains easily extracted. Blood appeared in the urine; but in fourteen days the boy was well, and was discharged. Later on he came to show himself, when a large fossa in the left lumbar region had formed, which allowed the fist to be pushed into it; the parts felt flaccid and unresisting.

Siddu Losa, Hindu, aged twenty-two, suffered from severe pain and swelling in the left lumbar region about a year ago, pus and blood were passed in the urine, and a shooting pain down the thigh was experienced; gravel was also passed. The swelling burst and discharged pus by two openings, one of which afterwards closed, the other remained open. When admitted, on February 14th, 1885, the probe could be passed into this opening obliquely, and having been introduced three-quarters of its length, was felt to impinge on a calculus.

The patient having been chloroformed, the fistulous track was opened up on a director, the incision being two inches in length, but the finger had to be pushed in up to the hilt before the stone could be quite bared; it was then loosened with the nail, which occasioned a good deal of bleeding. Forceps were then introduced and an oval calculus weighing ninety-six grains extracted. For two or three days the urine was bloody and the temperature rose to 101°, and there was slight purulent discharge from the wound. These symptoms subsided, and the patient was discharged well on February 20th. Contraction of the tissues in the lumbar region is evidently taking place and a fossa is forming in that region.

Remarks by Mr. HATCH.—Few cases of stone in the kidney occurring in this country have, as far as I am aware, been placed on record. There was no difficulty in diagnosis, as a sinus was present in both cases.

A CASE OF OBLITERATIVE ARTERITIS; OPERATIONS; TETANUS; TRANSFUSION; DEATH; REMARKS.

(Under the care of Surgeon HATCH, M.B.)

Ismail K——, aged sixteen, a cultivator, noticed during the last rains of 1884 that the little toe of his right foot became blackened, ulcerated, and dropped off. He attributed this to exposure to damp while working in rice fields. Subsequently the other toes of that foot became similarly affected, and separated from the metatarsal bones. There was no history of any previous disease.

On admission, Feb. 3rd, 1885, he was found to be wretchedly emaciated; the greater part of the right foot was blackened, the metatarsal bones protruding nearly their whole length from the soft parts; there was a most offensive odour, and the patient was weak in the extreme; pulse very weak, and pulsation in tibials doubtful.

On the 4th amputation was performed. There was no hæmorrhage from the cut vessels, and they were evidently closed, but, as in a previous case, the stump had done fairly well, notwithstanding the apparently bloodless condition. The flaps were brought together and quinine and wood-wool dressings applied.

The patient was much relieved by the operation, but on the 9th the temperature rose, and severe pain was felt again in the leg. The dressings were removed and the leg was found to be cold and blackened. Amputation was immediately performed above the knee. The same evening, from the pinched appearance of the face and slight stiffness of the jaw, it was evident that tetanus had set in. Next day he lay very quiet; pulse thready; trismus the same; vomiting constant. He lingered on in this state, now better now worse, for some days, but the spasms of the muscles of the legs gradually became very troublesome, not violent, but preventing the patient from moving or even speaking. The stump was dressed, and though anæmic in appearance was otherwise healthy. Chloral had no effect on the tetanic symptoms, though given in twenty-five grain doses every four hours. The temperature remained steady, between 99° in the morning and 101° in the evening. It was then decided to try transfusion of blood; this was done with the consent of the patient. The skin at the bend of the right elbow having been rendered partially anæsthetic by cocaine injection, the vein was opened. At the same time an assistant killed a small goat. Blood from the carotids was received in a warm vessel and well whipped; it was then filtered and kept warm in a water bath. The nozzle of Aveling's apparatus having been introduced into the vein, six ounces of blood were slowly injected by a syringe fitted on to the nozzle. The effect on the patient was to rouse him from his drowsy state; the eyes became glistening and distended, and in a short time the skin was covered with perspiration. On removal to his ward, he slept for some hours. He looked better next day, his voice was also stronger; but, owing to spasm of the abdominal muscles, great difficulty in expectoration was experienced, and his transitory improvement was followed by death on the night of the 22nd at 10 P.M.

Remarks by Mr. HATCH.—For some reason or other, possibly the low state of vitality induced by insufficient nourishment, obliterative arteritis followed by dry gangrene is not uncommon amongst the poor of Bombay. The preceding case is a type of several I have seen occurring in young subjects with no history of any previous disease. Operation has been generally successful, but in this and in another case I saw under the charge of Dr. Gray of this hospital, amputation was probably not sufficiently high, as gangrene of the stump afterwards took place.

Medical Societies.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

A MEETING of the above Society was held on June 10th, Dr. Norman Chevers, C.I.E., President, in the chair.

Mr. E. CHADWICK, C.B., read a paper on Ventilation with Air from Superior Layers in place of Inferior Layers. He said his attention was early directed to instances of layers or strata of air of malarious influence, and referred to instances where those who were obliged to live within or beneath such layers suffered from epidemic visitations, while those dwelling on levels above them escaped. The general effect of land drainage had been to reduce mists and even to remove them, and in such instances had reduced the plague of midges in England, of mosquitoes in Algeria, and ague in the Fen districts of Lincolnshire. Dr. Niell Arnott had suggested drawing air from a height above the common and mist layers, and distributing it into houses by engine power or as gas is distributed; the principle was worthy of consideration in the construction of hospitals. The admirable methods of internal ventilation in some hospitals of Paris and in England really introduced air that was positively bad, because it was drawn from lower couches and was common street air polluted by street and sewer emanations; were the air drawn from superior and pure layers, there would be no need for washing the air of surgical wards before operations. Of the two systems of ventilation, one of "propulsion" or driving in the air, the other of "aspiration" or of drawing it out by suction, the principle of the latter was peculiarly adapted to drawing in the air from the superior layer, obtained from two, three, four, or five hundred feet, or whatever height might be desired. The principle was also applicable for securing sleep in India and southern cities, free from the plague of mosquitoes, since these fed exclusively in the animalised gases diffused amongst the lower layers of air. The engine power required for this service would be less than that for ventilation by punkahs. The temperature of the superior air might be easily raised, as at Lariboisière Hospital, by hot water in its downward course, or on its admission into the building; it could easily be lowered, if necessary, by being passed over surfaces cooled down by evaporation. The expense would be less than that of warming edifices by the ordinary method. Common absorbent brick ought not to be used in the construction of towers for the obtaining of pure air, but non-absorbent concrete would appear to be the most eligible material; the requisite heights of the towers would have to be ascertained experimentally.

Inspector-General ROBERT LAWSON drew attention to the subject of Outbreaks of Cholera in Ships carrying coolies from Calcutta, and showed the periods of these occurrences and the ships' positions at the time. He said that when Mr. Bolton G. Corney, colonial surgeon, Fiji, was in this country last autumn he mentioned that cholera had appeared in some ships carrying coolies from Calcutta to Fiji, and that some ten cases of cholera had occurred in 1880 among coolies who had been in the colony about a year, four of which had proved fatal. Since his return to Fiji Mr. Corney has sent home notes of four ships that suffered from cholera during their voyage from Calcutta; each vessel had about 500 coolies besides its crew. Of these, the *Leonidas* sailed

on March 4th, 1879, and on the 7th, being the fourth day after the coolies embarked, a European sailor was attacked with cholera in lat. 18° N., long. 90° E.; other attacks occurred among the coolies on the eighth day, and daily from the fourteenth to the twenty-second days, on the last of which the ship was in lat. 3° N., when they ceased. The *Poonah* sailed on April 7th, 1883; cholera broke out on the 12th, the sixth day after embarkation, in lat. 16° N. Fifty-four cases occurred among the coolies, the last on the thirty-sixth day in lat. 12° S., but a European was attacked on the forty-first day in 18° S. The *Howrah* had a fatal case in a child before sailing; the body was sent on shore with its mother and another child, and the ship left on April 9th, 1884. The next case occurred on the ninth day after embarkation, in lat. 12° N., long. 91° E., and on the fifteenth day there were three in 80° N., after which there was no more cholera, though diarrhœa continued till the fortieth day. The *Pericles* sailed on May 10th, 1884; the first case of cholera occurred on the 14th, the fifth day after embarkation, in 17° N., 90° E.; numerous cases occurred up to the twenty-ninth day, when the ship was in 35° S., having made an unusually rapid passage through the tropics. There are no further details for the *Poonah* or the *Pericles*. In addition to these instances, H.M.S. *Cruiser*, on passage from either Madras to Trincomalee to Swan River, Western Australia, in 1831, had four deaths from cholera. Of these, one was attacked on July 12th in 40° N., 91° E., two on July 26th in 90° S., 95° E., and the fourth on August 8th in 28° S., 85° E. The date of sailing and of arrival at Swan River are not specified. Following up this investigation, a table in the eighteenth annual report of the Sanitary Commissioners with the Government of India, p. 135, gives the names of thirty-two ships carrying coolies from Calcutta to Mauritius, Natal, and the West Indian Colonies, being all those in which cholera occurred from 1871 to 1880 inclusive. The total number embarked during this period was 129,527, of whom 14,752 sailed in the vessels just alluded to, of whom 181 died of cholera. The days after the embarkation on which the deaths occurred in each ship were specified in the table from the first to the twentieth singly, and above the twentieth in a group. Arranging these vessels according to the days on which the first death occurred, they resolve themselves into four groups. The first embraces four in which the first deaths from cholera occurred from the first to the fourth day and the last on the sixth day. The second group of nine ships had the first deaths from the seventh to the sixteenth day; in these the last took place on the seventeenth or earlier, except in two, one of which had a single death on the nineteenth and another on the twentieth day. The third group of eight had no death before the twenty-first day. In the fourth group of eleven ships three had deaths in the first two periods, two had them in all three, and six in the last two only. Sailing ships from Calcutta bound for points south of the equator proceed along the meridian of 90° E. as nearly as the winds permit; about the Line they usually deviate somewhat to the eastward until they reach the S.E. trade wind; if bound westward, this is a fair wind for them, and all follow nearly the same track as far as Mauritius; if going eastward, they have to get through the trade wind with as little westing as possible to reach the westerly winds found to the south of it. For these reasons all sailing ships from Calcutta going south follow much the same track until they reach the equatorial margin of the S.E. trade, which varies from 4° S. to 12° S. on the 90° E. longitude, according to season. From several instances the approximate mean latitude of these on the seventh day after embarkation of their coolies is found to be 15° N., and on the sixteenth day 7° N., while on the twenty-first day their position is about 1° N., with a variation in particular cases, however, of 3°, or even more, either way. The positions, then, in which the outbreaks in the three groups above mentioned took place are pretty clearly defined; and as there was no succession of cases from embarkation to account for them, they must have been due to factors which came into operation in the localities where they occurred. These factors are not always active in the same localities; thus, of the sixteen outbreaks above twenty days, three occurred in 1872, seven in 1873, and three in 1874, while there were but three other instances in the remaining seven years of the decade. There is no record of cholera having been epidemic on land bordering on the Indian Ocean south of latitude 21°, but the *Cruiser* and *Pericles* had cases in 28° and 35° S., and the *Windsor Castle*, carrying troops from England in 1866, had a fatal case in 37° S. 39° E., to the south-east of the Cape of Good Hope, showing the causes of the disease may be in operation at sea much beyond 21° S.; and deaths from cholera have actually occurred in the Cape Colony and Natal, in Tasmania (43° S.), and in New Zealand. At the Cape and Natal such cases are usually accompanied by a prevalence of choleraic diarrhœa, and precede by several months the appearance of cholera in the epidemic form at Mauritius, or the east coast of Africa to the north, and the adjacent islands, and, at such times, ships at sea between the Cape and Mauritius experience attacks, though they may have had no communication with the land for many days. These facts show that the factors which give rise to cholera may be in force over the sea as well as over the land, that they frequently operate over very extended areas, and the single cases, or small groups, which spring up under their influence are not fortuitous, but are really indications of their presence and activity.

ACADEMY OF MEDICINE IN IRELAND.

AT a meeting of the Medical Section on March 27th,

Dr. FINNY illustrated the subject of very high temperature in rheumatic fever in its clinical aspects by recording two cases which had occurred in his hospital practice. The first was a young man who was admitted to Sir Patrick Dun's Hospital last November with his first attack of acute rheumatism. The fever was moderate, but the arthritic pains and the sweating were most pronounced. The only two features in the case which were remarkable before the hyperpyrexia set in were: (1) the prominence of nervous restlessness with early loss of command over the bladder; and (2) the total failure of salicine, in full doses, either to relieve the pains or to reduce the fever. On the morning of the ninth day of his illness, and without any cardiac complication, the patient became delirious, the face was flushed; the temperature stood at 103°; pulse 116. At 6 P.M. the temperature rose to 104·4°, pulse 132, and he was wildly delirious, moving the painful joints, incessantly raving, and passing everything under him. At 8.30 P.M. the temperature (in spite of twenty-five grains of quinine administered during the day) was 105·4°; pulse 160; respiration 44; and at 10·15 P.M. the temperature was 105·6°. Dr. Finny then applied cold for forty minutes, by means of relays of towels wrung out of iced water from the head to the feet, fresh cold towels replacing the others as soon as they became warm. The effect on the delirium and noisy respiration was almost immediate, as the patient soon became calm and quiet, and was drowsy in fifteen to twenty minutes. The temperature also rapidly yielded, as in half an hour it had fallen from 105·6° to 101·5°, and the pulse from 160 to 132. Thus—10.15 P.M., temperature 105·6°; 10.30 P.M., temperature 104·8°; 10.45 P.M., temperature 103·8°; 11 P.M., temperature 101·5°. Half an hour later, and after the ice-packing had been discontinued, the temperature fell to 100·4°. The good results lasted for thirty-eight hours, when the fever again rose to 104·1°, and the delirium and nervous excitement returned. The same treatment again reduced the fever by 2°; but the effect was transient, and, while the physical powers were plainly failing, the temperature rose from 102° at 6 P.M. on the eleventh day of his fever to 105° at midnight, to 107° at 2 A.M., standing at 108·8° at 3 A.M.; and he died at 3·30 A.M. A post-mortem examination showed the absence of peri- or endo-carditis, or of any disease of the lungs or kidneys. The brain was not examined. The second case was that of a woman aged thirty-seven, who, on the seventeenth day of a moderately severe attack of rheumatism, exhibited slight evidences of pericarditis, and the day following the temperature rose to 104·6° in the morning, and at 5 P.M. to 107·2°. The hyperpyrexia was associated with a deeply flushed face, shallow, rapid, and noisy respiration, and semi-comatose delirium. Under the ice-pack, applied in exactly the same manner as in the other case, the temperature fell in forty minutes to 103·8°, and after its removal it sank to 100·6° four hours subsequently. The patient afterwards made a good recovery, without any return of the alarming symptoms, and with a rapid clearing of all pericardial complication. Reference was made to the only other recent case reported—namely, that by Surgeon-Major Quinton, where similar treatment brought down a temperature of 108·8°, with immediate and permanent good results.—Dr. QUINLAN admitted that cases in which there was a very high temperature were very fatal; but, at the

same time, wished that the salicine treatment had been pushed much further than Dr. Finny stated. He had given up to sixty grains, frequently repeated, and had found the drug perfectly harmless in these doses and preferable to salicylate of soda.—Dr. FOOT directed attention to the circular published twenty-five years ago, in which an analysis of twenty-nine different modes of treating rheumatic fever by eminent Dublin practitioners was given, and also referred to the expectant treatment by Hughes Bennett, of Edinburgh. As all these plans of treatment seemed equally successful, he thought that undue credit ought not to be given to salicine. He thought that once the temperature rose above 106°, certainly above 108°, the case would prove fatal.—Dr. R. MONTGOMERY said that he had often seen the late Sir Dominic Corrigan give one-grain doses of opium, frequently repeated, with good results.—The CHAIRMAN confirmed the treatment which Sir Dominic Corrigan had used, while attending carefully to the secretions. He had been himself in the habit of combining the opiate with salicylate of soda, with the result of keeping the patient easy and of enabling the disease to be conducted through in as many days as it used to occupy weeks. Hence he did not doubt the specific effect of the treatment, particularly the salicylate of soda. The bath was a hazardous remedy, the patient being liable to get a dangerous chill after immersion. When bloodletting was in vogue, he had seen a considerable number of cases treated by that method with good effect; he had seen epistaxis occur in the disease.

The chair having been vacated, and taken by Dr. Finny,

Dr. HENRY KENNEDY read a paper on Senile Dementia, which occurred in an old lady, aged eighty, six weeks subsequent to the fracture of the neck of the thigh-bone. After the usual remedies had been tried and failed, a course of the extracts of hyoscyamus proved useful, and, on the addition of small doses of mercury, a complete cure was obtained except that her sleep was not restored. This symptom, however, was at once conquered by placing the patient with her head to the north. The author entered at some length into the reasons for the treatment adopted. He had seen the case.—The CHAIRMAN (Dr. Finny) said it was an important question what would answer best in dementia with great sleeplessness. He had not himself succeeded well with chloral, or even opium, of which large doses had to be given to produce any effect at all.—Dr. MOLONEY suggested open-air exercise or driving as much more satisfactory than drugs to induce sleep.—Dr. FOY specified the three preparations of hyoscyamus—the crystalline, the amorphous, and a soft extract known as hyoscyamus; but the only trustworthy preparation was the alkaloid, as prepared by Merck of Dresden.—Dr. KENNEDY having briefly replied, the Section adjourned.

At a meeting of the Obstetrical Section on April 10th, Professor Dill, of Belfast, in the chair,

Dr. F. W. KIDD exhibited a very complete Decidual Cast of the Uterus, obtained from a patient whose history did not point to pregnancy as a cause. The size of the cast was scarcely greater than that of a non-gravid uterus, and he was inclined to regard it as an unusually perfect menstrual decidua, which had been expelled *en masse*. Some discussion ensued as to the exact nature of the specimen, which, with the consent of Dr. Kidd, it was finally determined to refer to the Committee of Reference for examination.

Dr. NEVILLE, sectional secretary, exhibited for Dr. H. Macnaughton Jones a new Demonstration Speculum, designed to show the cervix to a number of students in a class at the same time. The image of the cervix was thrown upon a good-sized mirror, so jointed on the speculum (a metallic Fergusson's) that it could be moved freely about in any direction.—Dr. MACAN and the CHAIRMAN both expressed their conviction that the instrument would achieve its objects, and prove very useful for teaching purposes.

Dr. MACAN read a paper on Artificial Vesico-Vaginal Fistula for the Cure of Chronic Cystitis.—Dr. ATTHILL considered many cases of chronic cystitis amongst the most intractable of diseases when treated by ordinary methods. He had frequentiy recommended the making of an artificial fistula in such cases, and looked upon this measure as the only one likely to eventuate in cure when the cystitis had lasted for some time. His great difficulty was in persuading patients to undergo such an operation.—Dr. DOYLE believed that the credit of originating this plan of treatment was due to Sir H. Thompson.—Dr. NEVILLE said that, so far as he knew, the operation under discussion was first advocated and performed by Emmet of New York. The operation exemplified a cardinal law in surgery—viz., to give rest to an inflamed part,—and was a practical application of the principles enunciated so well by Hilton in his work on "Rest and Pain."—Dr. FOY was under the impression that the operation had been done earlier than by Emmet or Sir H. Thompson.—Dr. MACAN having replied,

Dr. NEVILLE read, for Dr. W. J. SMYLY, a paper on some points in the Diagnosis of Pelvic Hæmatocele.—The discussion upon this paper was postponed until the next meeting of the Section.

At a meeting of the Sub-section on State Medicine on April 16th,

Dr. C. A. CAMERON read a paper on the Results of the Application of the Laws relating to the Adulteration of Food and Drugs in Dublin, in the course of which he stated that the first Act relating to adulteration of food and drugs had been passed in 1860, through the influence of Mr. Scholefield. Only three public analysts were appointed under the provisions—Dr. Letheby, by the Corporation of London; Dr. Bell, by that of Birmingham; and the author, by that of Dublin. With the exception of Dr. Bell, the author was now the senior public analyst in the United Kingdom. The Act of 1860 was not put into force in any town save Dublin. In 1862 a public analyst was appointed, and the following year the clerks of the markets collected articles for analysis, and several of them were found to be adulterated, and the vendors were successfully prosecuted. The defects in the Act were, however, conspicuous. No officers could be appointed under it whose sole duty it would be to act as food inspectors. The fines levied for breaches of the Act were payable into the Imperial Treasury instead of into that of the local authority charged with the execution of the Act. The seller of the inspected articles had the option of accompanying the purchaser to the analyst—obviously a privilege which, in the case of country districts, prevented the Act from being worked. Notwithstanding its many defects, this Act was worked in Dublin for ten years, and was the means of putting an end to the practice of adulterating many of the articles of food in common use. A very large number of convictions for the sale of adulterated articles were obtained in Dublin. In 1872 another Act was passed which enabled local authorities to appoint food inspectors to collect articles for analysis. A defect in the first Act was remedied—namely, appointing the courts of quarter sessions instead of grand juries in Ireland to be the appointing authorities. In England the courts of quarter sessions are fiscal bodies and the grand juries are not, while in Ireland the grand juries are fiscal bodies. By the Act of 1860 the Irish courts of quarter sessions could appoint but could not pay public analysts. Only one court made an appointment—namely, that of the county of Dublin. In 1875 a third Act was passed. It repealed the section enabling the vendor to accompany the purchaser to the analyst. This alteration enabled the grand juries of the county to appoint analysts in cities outside of the counties. In Dublin these Acts have, on the whole, worked fairly. At first it was found that bread, flour, tea, coffee, mustard, sweetmeats, and milk were largely adulterated. Now, with the exception of milk, it would be difficult to find an adulterated article in Dublin.—The PRESIDENT inquired whether Dr. Cameron had met with many cases of adulterated butter, instancing butterine and bosh butter.—Dr. CAMERON said there was a great deal of bosh butter sold; but within the last few years a new form of adulteration had been introduced by incorporating water in the butter. Quite recently, in Drogheda and Newry, there were cases in which 45 per cent of water had been incorporated.—Dr. HENRY KENNEDY said he had frequently seen children whose illness he could attribute to nothing but adulterated sweets. He believed that plaster-of-Paris entered largely into their composition, especially of almond sweets, and that the colouring matter was also deleterious. The only pure sweet, in his opinion, was sugar barley. However, as he had seen Dr. Cameron's certificate of pure sweets, he asked whether there were any sweets really pure in the proper sense of the term. As to milk, he had seen white powder in it, and the specific gravity being made up in a way he could not explain, and he had heard that calves' brains were mixed with milk. What the adulterants were other than water he was anxious to know, both with regard to milk and butter.—The PRESIDENT con-

sidered that vermilion was more likely to cause obstinate diarrhœa than any other symptom of mercurialisation, and that possibly the great fatality of diarrhœa in Dublin was, to a certain extent, due to the enormous indulgence by children in sweets. Of sweets, one of the safest was the crystalline sugar-candy, the crystals being unlikely to take up obnoxious or adulterant matter.—Dr. CAMERON, in reply, said that there was no adulteration of sweets at present in Dublin. He had analysed hundreds of specimens during the last four years without finding plaster-of-Paris, white clay, or poisonous pigments. The yellow was from saffron, and the pink from carmine. He found the yellow stuff sold in the street to be composed of a small quantity of honey, sugar, and flour. Eating large quantities of sweets and diarrhœa resulting did not prove that the sweets must be adulterated. Pastry made children and adults ill. The only question was whether the raw flour in the cheaper kinds of confectionery might not produce some bad effects. But the common sugar-stick was nothing more than sugar partly candied by being heated in an iron pot and rolled upon a flag. Comfits were perfectly pure at present.

Dr. GRIMSHAW (Registrar-General) sent an apology, regretting that illness prevented his being present to read a paper on the Relative Prevalence of Disease and the Relative Death-rates in Town and Country Districts in Ireland.—On the motion of Dr. KNOX DENHAM, seconded by Dr. MONTGOMERY, it was agreed to take Dr. Grimshaw's paper as read and to discuss it, and to dispose of Dr. Jacob's paper on the Compulsory Notification of Disease at a special meeting of the Sub-section to be held in the month of May.

CAMBRIDGE MEDICAL SOCIETY.

AT the meeting on May 1st, Dr. J. B. Bradbury, president, in the chair,

Professor PAGET brought forward a case of Disease of the Spinal Cord, which had been under his observation in Addenbrooke's Hospital for a long time, and showed the temperature chart recording the remarkable variations of the bodily temperature. The complete account is published in another column.

Dr. BRADBURY related a case of Recovery from Cervical Paraplegia. The patient, a girl aged sixteen (shown at the meeting), had been under his care for a year in Addenbrooke's Hospital. When admitted on April 30th, 1884, there was a previous history of sore-throat, and a year before she had attended as out-patient for pain and stiffness in the back of the neck, which had continued ever since. On April 6th, while at work, she felt twitching in the right arm and leg and occasional involuntary movements, and on April 13th lost all power in the right arm and leg, which had continued. At this time twitching began in the left arm and leg and after a week paralysis, not complete in the leg; there was also considerable loss of sensation in all the limbs, and the catheter had been necessary for about a week. Her state on admission was as follows:—Paralysis of right arm complete, and nearly so of right leg and left arm, but fair power of movement of the left leg. Sensation blunted in all the limbs. Patellar reflex exaggerated in both knees, most in right, and right angle clonus well marked. Urine has to be drawn off twice daily; no albumen. Fæces passed unconsciously. She complains of much pain in the back of the neck and is unable to turn her head round. There is also tenderness on pressure over the cervical spines, and that of the third cervical vertebra is unduly prominent. During the next few months the paralysis increased, and involuntary startings and attacks of rigidity in the limbs were noticed, and on August 20th the right side of the face was partially paralysed. The muscles all responded well to the faradaic current. In September some improvement began to be noticed, the rigidity was less frequent, and there were signs of returning power in the arms. The urine contained pus and occasionally blood, and was often offensive. From this time onwards the improvement continued steadily in spite of occasional exacerbations in the cystitis, and in April, 1885, she was able to walk about, and had fair use in both her arms. There was still some pus in the urine, the quantity varying from day to day. The temperature throughout the illness showed at times remarkable variations, the rise often preceded by a rigor, on one occasion reaching nearly 107° and falling again to 97°, and frequently followed by a free discharge of pus from the bladder. There was still well-marked thickening of the tissues and prominence of the spines of the upper cervical vertebra, and some projection could be felt in the pharynx; the patient was unable to move her head round quite freely. Dr. Bradbury said it was a typical case of "cervical paraplegia" as described by Sir William Gull. The lesion in this case was probably limited to the portion of the cord corresponding with the third cervical vertebra, which was no doubt the seat of caries, followed by pachymeningitis and myelitis. The treatment consisted in rest in bed, the head being kept fixed between sand bags. None of the drugs administered appeared to influence the course of the disease.—An interesting discussion ensued upon the questions raised by the above cases, more particularly those relating to bodily heat and its irregularities in certain diseases of the nervous system.

Reviews and Notices of Books.

A Manual of Dermatology. By A. R. ROBINSON, M.B., L.R.C.P. & S. Edin., Professor of Dermatology at the New York Polyclinic, &c. With 88 Illustrations. New York: D. Appleton and Co. 1885.

THIS manual of 647 pages, which essays, and with considerable success, to present concisely the subject of dermatology in its modern aspect, "is intended to be the basis of a future, much larger, more pretentious, and more original work." The original histological contributions are the valuable portions of the book, and we notice that no less than sixty-five out of the eighty-eight illustrations are original. The rest of the matter is not so completely satisfactory. The treatment, for instance, is considered in a very short preliminary section, and in more or less condensed remarks under each disease, whilst the author has elected not to append a list of formulæ, but to content himself with principles and indications. English readers will be glad, however, to recognise that many of their views as to etiology and treatment receive considerable acceptance. We are not entirely satisfied with the descriptions of disease, though as far as they go they are accurate, and most of the important points are dealt with. The description of the syphilides, and of hereditary syphilis especially, is rather meagre. As examples of incompleteness, we may mention the absence of any description of the affection of the deeper tissues in many cases of morphœa; there is no distinction drawn between acute general and local chronic cases of alopecia areata; there is not a good description of the changes in the hair, and no allusion to the absence of pigment in the new growth of hair observed in many cases. The descriptions of vitiligo and the definition of erythema multiforme are imperfect. Amongst other omissions, we have failed also to find any account of the lymphatics, framboesia, ainhum, acne varioliformis, varicella gangrænosa, tinea imbricata, and dermatitis papillaris capillitii. Inaccuracies are rare; but we cannot agree with the statements that xanthoma is never present in children, that prurigo in England is practically unknown, and that the pigmentary syphilide is made up only of pigmented macules. We notice that the eruptions of the acute specific diseases are classed with exudationes, and syphilis as an *acute* contagious disease. Some of the special points to be noted are the description of a curious variety of sudamina, the inclusion of miliaria with eczema, the removal of acne from the class of glandular inflammations, the position of psoriasis as an hypertrophy, the mention of roseola as a form of hyperæmia only, and the separation of lichen planus and lichen ruber, the former being considered an inflammation of the papillæ and upper part of the corium, and the latter an hypertrophy of epidermis.

On the whole it is a well written and trustworthy manual, and we especially congratulate Dr. Robinson on his long-continued and valuable histological work.

Eléments de Pathologie Chirurgicale Générale. Part I. By F. TERRIER, Agrégé of the Faculty of Medicine of Paris, Hospital Surgeon, &c. Paris: Félix Alcan, Successor to Germer Baillière and Co.

DR. TERRIER is a surgeon of the new school, and is consequently imbued with all the modern notions of his art. He has already produced several important works on surgery, and his "Elements of General Surgical Pathology" is to be published in two parts. Part I. contains no less than 419 pages, and treats of traumatic lesions and their complications, and the influence on them of the various diatheses as well as that of acute affections.

The author defines the title of his work as comprising the study of surgical affections which may have for their seat all, or nearly all, the regions of the body. He does not, however, wish it to be inferred that he considers his subject as something distinct from general pathology. Both are one in essence, and the laws which govern the latter are as applicable to surgery as they are to medicine. Surgery, he tells us, does not differ scientifically from medicine; it has the same procedures of observation and leads to the same deductions as regards diagnosis, prognosis, and treatment. The division, therefore, of pathology into medical and surgical is merely artificial, arbitrary, reversible, and was established only to facilitate the study and the treatment of maladies.

It is only within the last few years that there has been a manifest tendency among surgeons to exercise their medical knowledge in the treatment of wounds and the so-called surgical diseases. In other words, surgeons of the present day not only attend to the wound but also to the patient, as the latter may have been in a pathological condition before receiving the injury, or the disease may have supervened on some traumatic lesion. Professor Verneuil has, in France at least, contributed in no small measure to the awakening of the present generation of surgeons to the importance of attaining a thorough knowledge of general and medical pathology as a necessary qualification for the practice of surgery; and it is now far from uncommon to see a surgeon wielding a stethoscope as well as a scalpel.

In looking over the index, one is struck with the number of medical diseases that are treated of in this volume. In the purely surgical portion a rather long chapter is devoted to wounds and to the different modes of dressing. Antiseptics and disinfectants necessarily occupy a large space, and the special method introduced by Sir Joseph Lister, with the modifications it has undergone, are also fully discussed. Besides a full index, Part I. contains a complete bibliographical list of the various works that have been consulted by the author. The book is written in a very simple and readable style, and may with advantage be perused by physicians as well as surgeons.

Micro-Chemistry of Poisons, including Physiological, Pathological, and Legal Relations. With an Appendix on the Detection and Microscopic Discrimination of the Blood, adapted to the Use of the Medical Jurist, Physician, and General Chemist. By THEODORE G. WORMLEY, M.D., Ph.D., LL.D., Professor of Chemistry and Toxicology in the Medical Department of the University of Pennsylvania. Second Edition. Philadelphia: J. B. Lippincott Company. 1885.

IT is with much pleasure that we record the appearance of the second edition of Dr. Wormley's admirable book on the micro-chemistry of poisons. It has been revised and much enlarged, and several new and important chapters have been added. The account of the chemistry of the blood is excellent and is thoroughly practical. The weakest part of the book is that devoted to treatment. Even in the case of so common a poison as opium the directions for the administration of appropriate remedies are very indefinite. For example, although the value of hot strong coffee is referred to, the necessity for injecting it into the rectum when the patient is comatose is not mentioned, and the importance of the hot and cold douche used alternately is passed over in the most cursory manner. The index is so imperfect that it is almost useless for purposes of reference. Even a drug of such importance as an emetic as apomorphia is not there mentioned, and we find not a word about resorcin, colchicum, and many other drugs now recognised as active poisons. We notice, however, that it is stated under the head of opium that the employment of a 2 per cent. solution of apomorphia has been recommended, and reference is given to a paper published as recently as 1883. This is obviously absurd, for the use of apomorphia as an emetic in cases of poisoning by opium was known long anterior to that year. Turning to a text-book on the subject, published in 1881, we find it explicitly stated that apomorphia, "although prepared from morphia, differs so completely in its action from that alkaloid, that there is no reason why it should not be given in opium poisoning." In a well-known work on pharmacology, the third edition of which appeared in 1880 we are told that "there is now sufficient evidence to show that apomorphia is a safe and reliable emetic, possessed of advantages which have already been sufficiently dwelt upon. It may be used whenever it is desirable simply to empty the stomach. In narcotic poisoning there is no reason why it should not be given hypodermically." Professor Wormley should certainly have been acquainted with this last passage, as it was written by one of his own colleagues in the University of Pennsylvania. We think, too, that in future editions directions might be given with advantage for the treatment of certain of the commoner combinations of poisons, such as opium and belladonna, or belladonna and aconite. These are small faults, perhaps, but in a work of some 750 pages we naturally look for something like completeness. The chemical tests are admirably arranged; and the illustrations on steel, nearly 100 in number, are marvels of accurate work. On the whole, it is a good book, and will be found of very great value in medico-legal investigations.

Von Ziemssen's Handbook of General Therapeutics. In seven volumes. Vol. I. Translated from the German by EDWARD F. WILLOUGHBY, M.B. London: Smith, Elder, and Co. 1885.

THIS, the first volume of a handbook on General Therapeutics, contains three articles—an introduction by the editor, Professor H. von Ziemssen; an essay on the Dietary of the Sick and Dietetic Modes of Treatment, by Professor J. Bauer; and an appendix on Koumiss Cures, by Dr. Strange of St. Petersburg. We must confess that as a work on therapeutics it is eminently disappointing, judging, that is, by the one volume. It is just a collection of essays, very excellent in their way, but very heavy reading and very uninviting. The information they contain is curiously antiquated. In a book dealing with dietetics we naturally look for some information respecting the use of extract of malt and pancreatin, but, as far as we can discover, the whole subject is ignored. It would be thought that at least the classical work of Dr. William Roberts of Manchester could not be overlooked, but we do not even find his name mentioned. In the bibliography appended to the section on "Artificial Feeding," no book is noticed of later date than 1880. During the last five years enormous strides have been made in our knowledge of the action of digestive ferments and in that time the whole subject has been practically revolutionised. In the article on Koumiss we find no reference to the very complete and accurate work on the subject published by Dr. George L. Carrick in 1881, and noticed very fully at the time in THE LANCET. This is the more surprising as both Dr. Strange and Dr. Carrick hail from St. Petersburg. We can only express disappointment, and fear that unless there is a marked improvement in subsequent

volumes, the Handbook of General Therapeutics will prove of little value to English readers. There are some notes by the translator, many of which are of interest.

Aids to Physiology. By B. THOMPSON LOWNE, F.R.C.S. London: Baillière, Tindall, and Cox.

IN this work of two hundred and fifty pages Mr. Lowne has given an epitome of physiology which is well suited for a beginner. He considers the subject under the headings of the chemistry of the body, the histology of the tissues, the blood, the contractile tissues, the nervous tissues, the circulation, the lymphatic system, respiration, and digestion. There is an introductory chapter, in which a brief account is given of protoplasm, vitality, metabolism, and the relations between animals and plants. The following extract will give a good idea of Mr. Lowne's style, and will serve to show that he has bestowed both time and thought upon his book. In comparing an animal to a machine, he remarks, "When a steam engine works two things are necessary: a supply of fuel and a supply of air for its combustion. The energy liberated by the chemical changes of combustion is the means by which the steam engine is kept at work, and as in all forms of mechanical movement heat is absorbed or rendered latent for the time, to produce an equivalent resulting motion. When an engine is stopped, the heat, which in a moving engine is developed by friction, escapes as extra heat in the steam. The heat of friction is the moving energy of the engine transformed into heat by the arrest of movement." In pursuing the comparison, he says: "In the case of the engine the fire must be lighted, in that of the animal it must be alive—active combustion in the engine, destructive metabolism in the animal. The engine must be supplied with fuel, the animal with food, and both with air, in order that oxidation may be carried on. In the engine the fuel is at once oxidised; in the animal the process is more complex. One part of the food is expended in building up another part into exceedingly unstable substances—constructive metabolism. These from time to time undergo destructive metabolism for the production of movement; heat is developed during both processes, but a part of the energy set free by oxidation is stored up, rendered potential by constructive metabolism for sudden need, such as the contraction of a muscle or the increased activity of the nervous system. The remainder of the food, after undergoing various changes, is finally excreted from the body. The engine undergoes wear and tear, and cannot repair itself. The animal tends to degenerate by activity, but does repair itself. The engine must be adjusted to do some special kind of work; the animal adjusts itself to many kinds of work. Thus an animal is a mechanism, but is both self-repairing and self-adjusting." This is all well put, though perhaps a line or two might have been added in relation to the nervous activity and its relation to the outside world. The statements made are correct, though necessarily brief, and the whole work forms a good introduction to physiology.

Archiv für Pathologische Anatomie und Physiologie. Herausgegeben von RUDOLF VIRCHOW. Band 100, Hefte 1, 2, und 3. Berlin: G. Reimer.

THESE three parts constitute the one hundredth volume of the *Archiv*. They contain the following papers:—*Part 1.* (April)—1. The One Hundredth Volume of the Archives, by Rudolf Virchow. 2. Two Mycoses of the Guinea-pig, by Professor C. J. Eberth: (1) Chronic Suppuration excited by Micrococci; (2) Bacillary Necrosis of the Liver. 3. On the Anatomy of the Cochlea and its Function, by Professor Voltolini. 4. On a Tumour composed of Striated Muscle, containing an unusual quantity of Glycogen, with Remarks on Glycogen in some Fœtal Tissues, by Dr. F. Marchaud. 5. On Hypertrichosis, by Dr. T. Michelson. 6. On Tubercular Disease of the Kidney in connexion with similar affections of the Male Uro-genital Apparatus, by Dr. C. F. Steinthal. 7. Researches on Congenital Defects and Arrests of Development of the Limbs, by Dr. N. Ehrlich. 8. On the Development of Primary Cancer of the Liver, by Thomas Harris, M.D. 9. On Changes in the Spinal Cord in Poisoning by Morphia, Atropia, Nitrate of Silver, and Bromide of Potassium, by W. v. Tschisch. 10. On Cowper's Glands, by Dr. H. Stilling. 11. (1) Hemicephalism and Aplasia of Adrenals, by Professor C. Weigert; (2) Aneurysma Aortæ Dissecans, by Dr. B. Lüttich. *Part 2* (May)—12. Contribution to the Pathological Anatomy of Erysipelas in connexion with the Typhus Epidemic at Zurich, 1884, by Dr. G. Rheiner. 13. On Senftleben's Observations respecting the Formation of Connective Tissue in Dead Portions of Doubly-ligatured Vessels, by Dr. F. Burdach. 14. On the Occurrence and Distribution of Tubercle Bacilli in Organs in various Tubercular Diseases, by Dr. G. Fütterer. 15. Hemicrania, Encephalon Trilobulare, and Schistoprosopus, by Dr. L. Heydenreich. 16. Reports from the Greifswald Pathological Institute, by Dr. P. Grawitz: (1) A Fœtus with Cretinistic Deformity of Skull and Bony Skeleton; (2) Dermoidal Cysts in Peritoneum and Diaphragm. 17. Studies on Early Cranial Deformities, by Julius Fridolin. 18. On the Renal Function in Fever, by Dr. Walter Mendelson. 19. The Histogenesis of Osseous Regeneration, by Dr. A. Bonome. 20. Remarks on Osteomalacia, by Dr. G. Mommsen. 21. (1) A Case of Congenital Diverticulum of the Jejunum, by Fausto Buzzi; (2) Reply to Remarks by Dr. Michelson on the Etiology of Alopecia Areata, by Dr. v. Sehlen. *Part 3* (June)—22. On Tuberculosis of the Female Mammary Gland, with especial reference to Giant-cell Formation, by Dr. E. G. Orthmann. 23. An Experimental Study of Putrid Intoxication, by Professor C. Blumberg. 24. On Cystinuria, by Dr. Stadthagen. 25. On the Question of the Constancy of the Schizomycetes (Cocco-bacillus zymogenus, and Bacterium Termo), by Dr. Th. Biedert. 26. On the Force and Action of the Muscles Compressing the Abdomen, by Dr. A. Lesshaft. 27. On Venous Embolism and Retrograde Passage into the Veins and Lymphatics, by Professor v. Recklinghausen. 28. Ammoniacal Fermentation of Urine, by Professor W. Leube. 29. A Case of Hygroma Cysticum Gluteale Congenitum, by Rudolf Virchow. 30. Final Remarks on v. Sehlen's Study of the Etiology of Alopecia Areata, by Dr. T. Michelson. An index of the contents of the series of one hundred volumes is to be issued separately.

The Animal Food Resources of different Nations, with mention of some of the Special Dainties of various People derived from the Animal Kingdom. By P. L. SIMMONDS, Author of "A Dictionary of Useful Animals," &c. London: E. and F. N. Spon. 1855.

MR. SIMMONDS, with his enormous reading and careful compilation, has collected in this little book an exceedingly interesting history of the animal food-supply of all countries. He has wisely abstained almost entirely from criticism and scientific discussion, and has merely presented as he found them the records of a world *menu* which is startlingly extensive. Thus, after a preliminary chapter containing many useful details and statistics, we are plunged into a somewhat revolting "Few Words on Cannibalism." Of these words we may take as an example the cheerful story of a whaling captain, who, hoping to civilise Easter Island, in the Pacific, took home, educated, and returned to the island a young native. "His affectionate friends, finding him fat and in good condition, took him to a convenient place, butchered, cooked, and ate him in the shortest possible time." Chapters III. and IV. are devoted to "Flesh Food from Mammals." Cattle, sheep, and swine of course occupy prominent positions, and many historical and statistical

facts are told in regard to them. There are, it appears, nearly three million pigs in Great Britain, of which Ireland can boast nearly half. But this is nothing to the American supply, for from four to five millions are slaughtered annually in Chicago alone. The rest of the chapters describe mammalian foods much less familiar to us. Thus we have monkeys (extensively used in Africa, South America, and elsewhere), lemurs, bats, hedgehogs, bears (the Swedish Government pays £3 for every bear brought in), skunks, badgers, rats, cats, dogs, foxes, lions, opossums, beavers, porcupines, elephants, and many other strange beasts, to say nothing of the better known horses, goats, and rabbits. The flesh of the old fox is, we are told on the authority of Sir James Ross, "by no means palatable, and the water it is boiled in becomes so acrid as to excoriate the mouth and tongue." We feel no desire to verify this statement.

Chapters V. and VI. deal with birds and eggs, and Chapter VII. with reptiles and amphibia. Turtles we know, and terrapins and frogs we have heard of, if not tasted; but crocodiles, salamanders, and snakes are delicacies as yet absent from our City banquets; yet all these, and many more, are fashionable delicacies in certain countries. Two chapters of great and varied interest describe the fish-supply of the world, and contain useful statistics and some amusing stories, which latter, indeed, pervade the whole book. Even at Greenwich we have never had the chance of trying shark, flying fish, or pomfret. On the general subject of fish-supply an article is quoted from our pages in which we commented on the dietetic advantages which would follow from a more liberal use of fish. The remaining three chapters are occupied with insects, crustacea, mollusca, &c., whose history ranges from cockchafers, ants, caterpillars, and worms to lobsters and oysters. Enough has been said to show that the book is a very amusing as well as instructive one.

A Text-book of Hygiene: a Comprehensive Treatise on the Principles and Practice of Preventive Medicine from an American Standpoint. By GEORGE R. ROHÉ, M.D. Pp. 374. Baltimore: Thomas and Evans. 1885.

THE author informs us, in his preface, that his object in writing the book was "to place in the hands of the American student, practitioner, and sanitary officer a trustworthy guide to the principles and practice of preventive medicine. He has endeavoured to gather within its covers the essential facts upon which the art of preserving health is based, and to present them to the reader in clear and easily understood language." We think it is a pity that he has treated the subject so exclusively from an American standpoint as to have omitted nearly all notice of what has been published in other countries in connexion with sanitary science. With the exception of a few references to German and to one or two reprints of English works, his information seems to have been chiefly drawn from those of his compatriots. On many points he is clearly behind what is now considered to be the mark in sanitary matters. We should have expected a much better work from the pen of a professor of hygiene; it may serve very well as a text-book for his lectures, but we cannot anticipate that it will ever take a place among the works of reference on the important subject of which it professes to treat.

SANITARY INSTITUTE OF GREAT BRITAIN.—The ninth anniversary meeting of this institute will be held, by permission of the board of managers of the Royal Institution, in their Lecture Theatre, Albemarle-street, on Thursday, July 9th, at 3 P.M. The chair will be taken by Sir John Lubbock, Bart., M.P., D.C.L., F.R.S. An address will be delivered by Professor W. H. Corfield, M.A., M.D., entitled "The Water-supply of Ancient Roman Cities," and the medals and certificates awarded to the successful exhibitors at the Exhibition held at Dublin in 1884 will be presented.

New Inventions.

NEW AURAL SYRINGE, ADAPTED FOR SELF-APPLICATION.

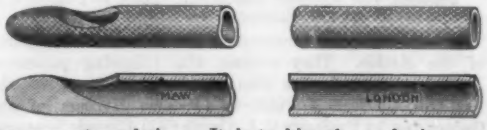
THE brass instrument commonly employed for syringing the ears often renders this little operation tedious to the patient and troublesome to the surgeon. It requires the use of both hands. The syringe must first of all be charged, and then placed in position within the aural orifice and discharged; it must then be removed, refilled, and again inserted in the ear. This complicated series of movements often produce muscular weariness, especially when they have to be continued any length of time. The new instrument is designed to overcome these inconveniences, and to make the operation easy of performance by the patient himself. It can be worked without any fatigue, as the

elastic balls and valves are so arranged that only five or six contractions of the hand are required per minute to secure an efficient and continuous stream. The expansion of the hand ball is assisted by a recoil spring, and the force of the current is regulated by increasing or diminishing the number of contractions. The engraving exhibits the method of self-application. The syringe can be easily placed in position. The nozzle of the pipe rests against the upper wall of the auditory canal, and the tube is securely suspended by means of a perforated elastic curtain attached to the gutter. The new aural syringe will be found a great convenience in every-day practice, saving both time and trouble, and assisting in the efficient treatment of many common aural diseases. It is manufactured at a very moderate price by Messrs. Maw, Son, and Thompson.

J. WARD COUSINS, M.D. Lond., F.R.C.S.,
Senior Surgeon to the Royal Portsmouth Hospital and Portsmouth and South Hants Eye and Ear Infirmary.

FLEXIBLE SILK CATHETER.

IN July, 1883, a description was published in THE LANCET of an improved form of metal catheter I had designed. I am now able to invite attention to a flexible silk catheter made on the same plan. Mr. Banks, of the firm of Messrs. Maw, Son, and Thompson, has been at much pains



to carry out my design. It is to him the profession owes the flexible silk tubing in use for catheters, stomach-tubes, &c., and I think this instrument presents very material advantages over those hitherto employed.

The alteration consists in filling up the end of the catheter beyond the eyelet-hole, and carrying this stopping obliquely

upwards opposite it, in such a manner as to do away with all sharp angles or crannies, in which dust and other impurities can lodge. To do this in metal was easy, but there was considerable difficulty with the webbed silk, a difficulty which Mr. Banks has successfully mastered.

The advantages are several. The catheter is extra strong where it used to be weakest. Cases of the breaking of a catheter at the eye while in use are not unknown; and everyone must have seen catheters worn and frayed most dangerously at that spot, which were yet in daily use by patients. The trick of knuckling over under pressure is also very troublesome to the surgeon. For patients who have to catheterise themselves this form of catheter has manifest advantages, as it combines flexibility and portability with ease in keeping it clean. The collection of filth to be found in any catheter after it has been a short time in a patient's charge is disgusting and dangerous, and I think all those who are inclined to attribute sepsis in the urinary tract to impure instruments, will welcome the modification I have described. A. OGIER WARD, M.B. and C.M. Edin.

Tottenham.

THE HALL TYPE-WRITER.

MESSRS. WITHERBY, of 74, Cornhill, the agents for this type-writer, have recently made an addition to the instrument which will very much increase its utility to those who suffer from paralysis. The addition consists of a ball, fixed to the handle, which can be easily grasped with either the left or the right hand, and is so placed that its weight makes the pointer rise from the holes without being lifted by the writer. At the same time it lessens the trifling force required to depress the handle and print the letter. The addition will render this convenient instrument suitable to many persons who could not have used it with the original handle.

THE ITALIAN PRESS ON THE SANITARY CONFERENCE.

THE leading journal in Rome, and indeed in Italy, is greatly exercised at what it deplores as the *fiasco* of the Sanitary Conference. "There is no use disguising it," says the *Opinione*—"the Conference has dissolved *re infectâ*; and though a diplomatic formula was contrived to veil the resultless issue, no one believes that it will ever meet again and come to any practical conclusion." The *Opinione's* chagrin is enhanced by the reflection that the initiative of convening the Conference was taken by Italy, and that the cause of the *fiasco* was due to the utter neglect on the part of the Italian Government to prepare a programme or to indicate the lines on which the Conference was to proceed. "When invitations," it says, "are issued to take part in a discussion, the invited participants are furnished with certain well-defined questions on which their judgments are to be evoked. But our Government, in its wisdom, prepared nothing, and it was a foreign delegate who tabled the proposals on which the discussion took place. Hence the whole proceedings were involved in confusion and disorder, and, to add to these, there were divergences among the Italian delegates, who thought more of their rival schemes than of their common action." Moreover, the Italian Government failed to do what other States on similar occasions have done: it failed to bring its delegates together, so as to put them in accord before the assembling of the Conference, and in this way came to a general understanding as to what their common country wanted or did not want; as to what they were to accept or to oppose. The Italian representatives thus pulled contrariwise, and, as the voting was by States, the deplorable spectacle was witnessed of Italy through one or more of her delegates supporting other interests than her own, these delegates dividing and reinforcing foreign camps. "How," asks the *Opinione*, "could we hope to come to any practical conclusion when the very Power which convened the Conference did not know her own mind?" The *Pungolo* of Naples, which reflects the opinion of the southern provinces, comments in a similar strain on the inconclusive collapse of the Conference. "And the most significant feature of all," it says, "is the fact that the proposal to suspend the sittings (the said proposal being but a diplomatic mode of declaring the Conference at an end) proceeded not from the English delegates, *the sworn enemies of every hygienic precaution and safeguard*, but from the German Ambassador, whose Government, at the London Conference on Egyptian affairs, was the first to provoke a European deliberation on the sanitary question. The result, in consequence, could not have been more lamentable." According to another Italian organ, the Conference had become involved in quite a labyrinth of difficulties from which there was but one escape—the proposal made by the German Ambassador. The majority of the Italian journals seem convinced that the Conference will never reassemble, and, indeed, that it is scarcely desirable it should do so. Certainly Italy, and the Mediterranean Powers generally, were quite overborne in argument by the British minority, a fact of which they have betrayed their consciousness in other ways than by the unwarranted imputation of the *Pungolo*.

SALICYLIC ACID IN RHEUMATISM.

To the Editor of THE LANCET.

SIR,—I have read with great interest Dr. P. W. Latham's communication to THE LANCET of last week on rheumatic fever. I have always looked with considerable doubt upon the lactic acid theory of the causation of rheumatic fever, and the admirable way in which salicylates control, govern, and subdue this affection has for the past twelve months led me to consider whether the true theory of its causation might not be arrived at by examining into the chemical action of this body within the human organism. Knowing that when taken internally a considerable proportion of the salicylic acid administered appeared in the urine as salicyluric acid, and that in order to become such it was necessary that it should combine with glycocine, or some substance or substances closely allied to it, I was led to the belief, which I have frequently expressed to medical friends, that an excess of glycocine, or of some nearly allied body, was the cause of acute rheumatism. It may interest Dr. Latham to know that his theory of the causation of this disease, to the aid of which he has brought such exhaustive chemical and physiological knowledge, has been partially and crudely thought out by another. The theory Dr. Latham has advanced would be much enhanced if it could be proved that acute rheumatism is produced by the intra-peritoneal injection of glycocine and uric acid. So long ago as 1883, and more especially after reading Dr. Garrod's Lumleian Lectures on Uric Acid, in which he detailed the influence of certain conditions and substances (notably benzoic and hippuric acids) upon the presence of this body in the urine, I believed that salicylates or their result when given internally—i.e., salicyluric acid—exerted a certain destructive or decomposing effect upon uric acid.

This belief was based upon the following premises:—

Firstly, that I had remarked the great benefit resulting from the use of the salicylate of soda in a case of gout which had recently come under my care, and also upon several cases of rheumatic gout.

Secondly, the close chemical relationship existing between the benzyl and salicylic groups of compounds, the members of the latter differing from the former by the substitution of an atom of hydrogen by the hydroxyl (OH), and the similarity of the action of the benzoates and salicylates when taken into the animal economy, suggested to me the belief that the therapeutic effect of the salicylates and salicyluric acid upon uric acid must be very much the same, as that of the benzates and hippuric acid already pointed out by Dr. Garrod.

Thirdly, I obtained the urine of a healthy man, and from this uric acid was readily thrown down by the ordinary method. From the same person under similar circumstances as to time, food, &c., but to whom salicylate of soda had been administered, I procured another sample of urine. In this instance uric acid could not be obtained, no trace of it being discernible by the murexide test. Further experiments of this kind did not uniformly present the same results, but in all cases the amount of uric acid found in the urine containing salicyluric acid was very appreciably diminished. I may add that subsequent clinical experience has strengthened my belief in the above discussed property of salicylic acid and the salicylates.—I am, Sir, yours truly,

T. DAVIES PRYCE,

June 24th, 1885. Resident Surgeon, the Dispensary, Nottingham.

THE LANCET.

LONDON: SATURDAY, JULY 4, 1885.

THERE are few more unsatisfactory features about our present national condition than the tendency to view every public question from a party standpoint, and to attribute to a political opponent everything that is suggestive of defective intelligence or of unworthy motive. There has been no more instructive or striking illustration of the truth of this remark than is afforded by the correspondence on the subject of disqualification for medical relief between Lord BALFOUR of Burleigh and Mr. CHAMBERLAIN, in which it is clearly shown that the same action taken harmlessly and even virtuously by Mr. CHAMBERLAIN and his colleagues in the House of Commons, when taken in the House of Lords by the Peers is denounced by this very gentleman as "a monstrous injustice," "an intolerable thing," "an iniquity," &c. We must as impartial, non-political critics deplore and denounce this use of a grave public question, and try to recall the public attention to it in a frame of moderation and common sense. It will be a bad day for English politics if criticism in this spirit and from such quarters is disregarded. Be this as it may, we have a clear duty as medical journalists in this matter which we must discharge.

We protest in the very front of the discussion that we have nothing but profound respect for the poorest voter. The poorer he is in one sense the more we respect him. The problem of living decently and respectably is not confined to the classes that are about to be enfranchised, but it is in their case beset with peculiar difficulties. Life to the artisan has much of labour and more of care, but the agricultural labourer has more of both in his life. His possibilities are slighter, his wages are smaller, his diet is poorer, his environment is altogether more hopeless and uninspiring; he seems born to dependence, and falls naturally into pauperism and the workhouse. When a poor man, whether artisan or agricultural labourer, contrives to keep his family off the parish, to pay their schooling, to contribute to a sick fund, and to discharge all his honest debts, we have the feeling that he is as respectable as any other man in the parish, and entitled to every political privilege which any other taxpayer is entitled to. The poorer the man who does all this, the more creditable is the achievement, and the more does he command our respect. It is in this view that we approach the question of disfranchisement on account of medical relief. We will make one remark more, which may be regarded as a concession to those who clamour for the disregard of medical relief as a ground of disqualification. We do consider that there is some difference between medical and other relief. We all feel that physical suffering must be relieved. Either at the cost of private means or of public funds, a poor man or his family must have a doctor. He may dispense with a lawyer or even a clergyman; but sooner or later, and generally pretty often, a man—and especially a married man—must seek the aid of the friendly doctor; and the doctor of the past has been so friendly that he has been sought and found at all hours of the night, till the public and the poor have become so familiarised with his "ready help" as to regard it as only the doctor's duty to go whenever and by whomsoever called, with or without pay. This state of things is most demoralising, and cannot be allowed to go on. All men who have studied the improvident poor have come to the conclusion that the relations between the poor man and the medical profession must be put on a sounder footing, not only for the sake of the much-enduring medical profession, but still more for the sake of the poor themselves. The question of disfranchisement for medical relief has enormous importance in this aspect. It accentuates the duty of every man to provide against sickness in himself and in his family. It has been said that disfranchisement on the score of medical relief would disfranchise 20 per cent. of the agricultural population who are now being enfranchised; but the facts of several parishes adduced by one writer in *The Times*—Lord EDWARD CAVENDISH—do not support this contention. Be that as it may, the facilities for entering sick clubs are now so great, that for the man himself at least—as Mr. WICKHAM BARNES has well maintained in a letter to *The Times*—the presumption of law should be that he has contracted for treatment in case of sickness. The law ought to be such as to give him a strong inducement to join a sick club. Law does so much nowadays for men, that it ought to stimulate them to do all they can for themselves. It will be bad for the State as well as for the parish if men are to have everything done for them without loss of privilege; and it will be a grievous wrong to the medical profession to neglect a great opportunity of requiring men to be provident in medical matters. We must protest against a sweeping assertion of difference between medical and other relief. There is a difference, but one that should not exist save in a few exceptional cases, and should not be recognised in law. For the great misfortunes and calamities of man a Christian State will always have its charities, but for the common incidents of life even labouring men may easily make honourable and independent provision.

MR. WYNN WESTCOTT, the deputy coroner for Central Middlesex, makes the disquieting announcement, in a little work just published on "Suicide," that whereas crime in general is decreasing in Great Britain, self-murder is steadily on the increase. Doubtless the proximate cause of this deplorable and humiliating state of matters is to be found in the great and growing pressure under which the business of life has to be carried on in a country which, being an island, has its boundaries fixed, while its population, already proportionally large, is enlarging rapidly. No one is to blame for these conditions of existence, which are to many unendurable; nor are they to be deprecated, inasmuch as an increase of population is, on the whole, evidence of prosperity. Meanwhile there are other factors in the result which the sociologist will do wisely to study, and that as a rule fall under the notice of medical men especially. For example, it cannot be doubted that there is greater instability of nerve-centres now than formerly. The wide prevalence of affections of the nervous system which characterises the time is in itself evidence of this instability. To what this

is due we will not now attempt to determine. Certainly it *cannot* be (looking to the progress of the "temperance" movement in recent years) the effect of indulgence in ardent spirits, as some would have us believe. That many of the persons who afterwards commit suicide are intemperate in the use they make of alcoholic stimulants may be admitted, but this is obviously something quite different from saying that those who habitually indulge in drink commit suicide. Nothing is gained by the misuse of figures in argument, and as we have frequently had to ask those who allege that intemperance is one of the most common and active causes of insanity to note the difference between the proportion of insane persons who drink and the proportion of drunkards who become insane, so we must ask those who allege that "drink" is *the* cause of suicide to observe that, whereas many of those who commit suicide may have been intemperate, there is not a vestige of ground for the assertion that of drunkards a large proportion die by their own hands. We must evidently look deeper for the cause of an evil which grows worse as other evils—and among the number the evils of intemperance—diminish.

Mr. WYNN WESTCOTT is of opinion that "the cultivation of a religious conviction of the sanctity of life and the sin of a self-inflicted death is a more certain hindrance to suicide" than most others; and he remarks, "Persons who are unable to obtain this mental conviction are, I believe, more prone to take their lives in time of trouble, and beyond good advice and the care of their friends, I do not know that any means exist to restrain them." Is it possible that, as Dr. CHARLES WILLIAMS, the author of a recent *brochure* on "Modern Pessimism," contends, the world has lost by that advance of intellect which has induced so many scientists, and a host of would-be "thinkers" in their wake, to put away the religious beliefs of earlier years as chief among childish things, and to assume a mental posture of formulated scepticism—that strangest of paradoxes—as more befitting a fully grown and robust intellect? Dr. CHARLES WILLIAMS would have us "return to the faith of our childhood," and believe as we once believed, unthinkingly, or apart from reason, for the sake of the rest and hope such trustfulness inspires. Thus much will be freely admitted by all: of two persons, one who believes in a future state, the happiness or misery of which is to be determined by the manner of his life in this world, and the other who believes that death ends everything for him, the former is the more likely to be deterred from rushing unbidden across the threshold of the unseen; while the latter, having no fear of the future, is more likely to seek relief from present trouble in what he believes to be oblivion. There is, however, another phase of the subject of faith in relation to the active cause of suicide—that is, mental misery—which ought not to be disregarded. The believer in a GOD who is the Father of His creatures must needs have more resources in a moment of extreme trial than the sceptic, who has nothing outside himself whereupon he can rely for help in a time of extremity. Wholly apart from the question of truth and fact, we are speaking of the effect produced on the mind—that is, the brain—by the reflex influence of two impressions: the one establishing the mental condition called "faith"; the other not simply failing to establish that condition, but setting up in its place a state of enforced self-reliance which cannot be wholly free from anxiety, and which often taxes the inner sense of self-dependence severely. Tell a little child to cross a plank bridge, and so place yourself that the child has no hope of help from you, and he will probably totter and fall. Tell the same child to cross the same plank bridge, and stand in front of him with outstretched arms, and he will advance steadily and succeed. You do not actually help him; for all practical purposes your image might as well be a phantom or chimera, but the effect on his mind of *faith* is to give him stability. What is true of the child is true of the man. If the mind is fixed on an object of faith outside itself, it is psychologically in a better condition than if there is nothing on which it can rely, or that inspires it with confidence. Therefore we say, without discussing the question of truth or fact, it is manifestly a loss to mind that the old belief, "the faith of childhood," no longer retains its hold on us. We cannot regard the aggressive spirit of scepticism which characterises the day as helpful to the cause of mental health; and we strongly incline to the opinion that to the growth of this destructive atheism must be attributed the increase of suicide, rather than to any other of the causes to which the evil is commonly ascribed.

We have more than once protested in these columns against the convenient assumption that suicides are *generally* committed in moments of "temporary insanity." This is a doctrine which has done much harm socially. That perfectly sane men and women commit self-murder is a fact which every one of us must acknowledge. It has been so in all ages, and in every country. The practice of advising juries to bring in verdicts of insanity for the sake of the feelings of survivors, and to cut the ground from under the feet of litigious Life Assurance Societies, is most objectionable. If Mr. WYNN WESTCOTT can inaugurate a better practice in Central Middlesex, he will deserve well of his fellow-citizens. We venture to think the total number of suicides would be materially reduced by the mere notification that in future the figment of "temporary insanity" would find no place in the process and function of *inquest*. Such a reduction would of course go largely to prove that the majority of suicides were committed by persons in full possession of their senses, and this we believe to be the fact.

CHOLERA continues to diffuse itself widely in Spain, and a large number of provinces are now infected. Last year the epidemic was mainly confined to provinces either immediately bordering on the Mediterranean, or to those which were near the coast, but this year the march of the disease is on a much wider scale. It is, however, significant that the epidemic is largely radiating from the same centres that were most affected in 1884, and that up to the present date the diffusion has mainly been from the east coast towards the centre of the country. Thus, at the present time, the coast provinces of Murcia, Alicante, Valencia, and Castellon are widely infected; and stretching further inland, the provinces of Cuenca, Teruel, Saragossa, and even Toledo to the south of Madrid, are seats of the disease. As to Madrid itself, the available information is not very trustworthy, and it remains to be seen how far the occasional attacks and deaths which have been recorded there have been genuine cases of cholera or not. Last year cholera maintained itself

for a long time in Spain, although it never resulted in such a serious mortality as that which took place either in France or in Italy. But deaths were recorded from one or other of the provinces of Alicante, Valencia, or Toledo during the greater part of November and even well into the month of December. After that date no further cholera news was published in the Peninsula until the commencement of this year's epidemic. And it is of no great practical importance to know whether the two epidemics were linked together during the winter season by an unbroken series of cases, for it is by no means a new experience to find a comparatively small epidemic in one year apparently dying out, and then reappearing with increased severity at the onset of the following summer. This is what has taken place in Spain; and, assuming that the published information is correct, it first made its reappearance in one of the provinces to which the disease clung the longest in 1884—namely, in the province of Valencia. The town first affected was Alcira, and this fact, together with the wide prevalence of the disease in Murcia, which is so seriously attacked at the present moment, exhibit certain points of interest in connexion with the history of the disease, to which a correspondent has called attention. He directs notice, in the first instance, to the fact that the past winter was one of exceptional severity, and to this may probably be due the cessation of the epidemic of 1884. The topographical positions of Alcira and Murcia are next adverted to. Alcira lies not far from the mouth of the river Jucar, and during the last winter the province was subjected to considerable inundations. Murcia, too, lies in a somewhat similar position on the river Segura, and both places in consequence exhibit conditions of site and exceptional wetness much the same as those which characterised Seville before the great outbreak of 1856, and which, following on the melting of late snows, suffered so severely from inundations before the cholera set in. Cholera in these localities, as indeed elsewhere, has shown a preference for low-lying, swampy neighbourhoods; but at the present stage the diffusion is by no means limited to localities having special topographical or other characteristics, and it is very much to be feared that an outbreak which has spread over so wide an area at a comparatively early period of the summer may find its way throughout a large portion of the Peninsula before the autumn.

IF the greatness of the European nations depends partly on the amount of alcohol they consume—as some high authorities venture to suggest,—there seems no immediate fear of the collapse of their power. We are treated every now and again to most interesting reports in *The Times* and other newspapers of the degree of this consumption in different countries of Europe. One of these appeared a week ago in the columns of our contemporary. The account given of Germany in the matter of alcohol-drinking is appalling. In 1875 and 1876 the amount of pure alcohol produced in the distilleries of that Empire was 200,000,000 litres; roughly, six litres per head of the population. By the year 1880 the quantity had increased to seventy-one litres yearly per head! Of the male suicides 13·40 per cent. are due to alcohol. There are 5212 cases yearly of alcoholism in a directly fatal form, to say nothing of those innumerable and multiform chronic affections which have their chief cause in the habit of taking alcohol. The 5212 cases are as follows: 3106 cases of dipsomania in asylums for this disease, 690 cases of delirium tremens in the lunatic asylums, 597 private dipsomaniacs, 508 suicides, and 311 drunkards accidentally killed. Seven-tenths of those suffering from alcohol are in the prime of life—between twenty and fifty. But the most significant statement is the one we have already quoted, and which indeed we venture to hope may be an error, that the amount of alcohol per head consumed in Germany has gone up from six litres in 1875 to seventy-one litres in 1880! In Denmark the evil of spirit drinking has reached a terrible pitch. In Belgium there is a public house for every twelve or thirteen grown up males! In Switzerland there is a very unsatisfactory increase in the drink traffic. These statistics are published in the form of a Parliamentary paper, and are based on the estimate of Consul-General OPPENHEIMER. The only country of which any satisfactory account is given is France, where, it is said, that a salutary Act of the Legislature has reduced the sad effects of drunkenness. We hope this may be so; but the account only comes up to 1880, and since then we have been told that France in her wines and in her brandy is drinking very deeply—more deeply, indeed, than any other European nation. It is suggested in the Parliamentary paper that the clergy, medical men, and schoolmasters of every nation could do much to mitigate the evil if their sympathies were thoroughly aroused. On our part we heartily respond to this appeal. We as a nation are in no position to cast stones at other countries. For nineteen centuries we have been drinking every kind of alcoholic drink that has come in our way, with consequences of various importance, including the Norman Conquest. This long inheritance of drink is its strength. It has got into the very tissues of the body and the very corpuscles of the blood. The degenerations which it causes are often transmitted potentially or actually, and the circumstances which it entails deeply secure the continuance of the evil. What can we do that we have not done to abate this vice? The leaders of medicine are conspicuously temperate in personal habit and in prescription. Medical science has demonstrated the connexion of the gravest diseases with anything more than the very moderate use of alcohol. No pathologist has more brilliantly worked in this region than the distinguished FRERICHS, whose nation now drinks seventy-one litres per head of pure alcohol. In spite of this we drink—drink at wrong times, on empty stomachs—strong, sometimes raw, spirit—and drink as if our object were to generate disease of the liver, the kidneys, or the brain without delay. Our young men drink, and, worse than all, women drink as they never drank before. The working man drinks, and the tradesman too. It is not with the sanction of physicians that all this takes place, and we gladly respond to Herr OPPENHEIMER's call, and pronounce such drinking as is going on in Europe a reproach to Governments and an immediate danger, as well as a reproach to everyone who indulges in it.

WE understand that Dr. Wallace of Liverpool has successfully performed resection of the female bladder for cancer by abdominal section, being, we believe, the first time the operation has been performed in this country. The patient is progressing satisfactorily, seven days having elapsed since the operation.

Annotations.

"Ne quid nimis."

THE UNIVERSITY OF LONDON.

A MEETING of Convocation of the University of London is summoned for Tuesday next, in order to nominate three graduates for the selection therefrom of a member of the Senate. Professor Carey Foster, B.A., Mr. S. Magnus, B.Sc., and Mr. Weymouth, D.Lit., M.A., are the candidates, the first-mentioned having by far the largest number of names attached to the nomination paper. Although the meeting comes out of the ordinary course, advantage has been taken of it by many graduates to give notices of motion. Thus, Mr. Dembski again brings forward his resolution respecting the preference to be given to members of the University in the appointment of examiners. Mr. Enright, B.Sc., is to move that a degree in Engineering be substituted. Mr. Bone, B.A., and Mr. R. H. Belcher, M.A., will call attention to the published list of "affiliated" institutions, and propose to refer to the annual committee the question of urging upon the Senate the revision and amendment of that list. Mr. T. Tyler, M.A., and Mr. W. T. Lynn, B.A., are to move a resolution requiring the publication of the names of members attending the meetings of Convocation. Mr. Bassett Hopkins, M.A., will call for information upon the attendances of the *ex officio* members of the Annual Committee, and will propose that the Standing Orders shall be amended to provide for the removal of such members who fail to attend the meetings of the committee for two whole years. Mr. Whitehead, B.A., and Mr. H. A. Nesbitt, M.A., will move to refer to the Annual Committee the resolution passed by Convocation in February, that a Doctorate of Literature or Philosophy should be as accessible to Bachelors of Arts as the D.Sc. is to Bachelors of Science. The last notice on the agenda is the one which will have the greatest interest for the medical graduates, and we trust that means will be taken to bring it on early, in order that such graduates may be present, and a definite expression of opinion taken. The resolution will be moved by Mr. W. J. Collins, M.D., B.S., B.Sc., and seconded by Mr. E. W. Roughton, M.D., and is to the effect, "That this House desires to express its approval of the resolve of the Senate, as intimated by the Vice-Chancellor, to maintain the standard and scientific character of the medical degrees of this University."

SHALL DR. BRADLEY BE LIBERATED?

ONE of the last departmental acts of the late Home Secretary, Sir W. Harcourt, was his refusal to advise Her Majesty "to grant a free pardon" to Dr. Bradley, now undergoing the most terrible punishment known to the criminal law. In the pages of THE LANCET appeal upon appeal has been made for an impartial inquiry to be held into the real merits of the case, and at length, after eight months in durance vile, Dr. Bradley has been condemned to finish his fearful sentence of two years' hard labour. The most powerful local influence was exerted on his behalf, for the petition to the Home Secretary was signed by more than a thousand medical men, including the staffs of the Sheffield and Rotherham public medical institutions. The facts of the case were set forth with precision and compared with known medico-legal maxims and professional experience; and we maintain that from their perusal no other conclusion could be arrived at than that Dr. Bradley's behaviour on the ill-fated occasion was perfectly consistent with his innocence; nay more, they were strongly negative of the supposition of guilt. We are informed that Sir W. Harcourt consulted the learned judge, Lord Coleridge, who tried the case. Unfortunately, there has been too much law and too little medical evidence already imported into the case. Although we criticised unfavourably some of Lord Coleridge's conclusions with regard to Dr. Bradley's conduct, the main fact remained that the summing-up and the verdict of the jury were not absolutely at variance with the facts deposed to by the several witnesses. Speaking broadly, the conviction would never have been obtained had proper expert evidence been tendered on Dr. Bradley's behalf. The case went to the jury without the necessary rebutting testimony and naturally popular sympathy was enlisted for the woman supposed to have been outraged. Had Dr. Bradley been guilty of the offence with which he was charged, his punishment was none too severe, but we have no reasonable doubt that Eliza Swetmore's belief was the outcome of disordered feelings consequent on an epileptic seizure. In the face of Sir W. Harcourt's decision, we earnestly beseech his successor to take into his consideration the cruel doom of a fellow-subject; and we would fain hope that he may be moved to immediate action. Let all legal technicalities be set aside. Let it be granted, if needs be, that the unhappy man was justly convicted on the evidence, but by all means let us have a full and impartial inquiry into the value of that evidence in the light of professional knowledge. Why not submit a copy of the depositions and the memorial of the medical practitioners of Sheffield and Rotherham to the judgment of the Presidents of the Colleges of Physicians and Surgeons and some expert in medical alienation? The report of such a body of men would furnish Sir Richard Cross with the requisite material from which to draw a fair and equitable conclusion. We trust that there will be no further necessity for an appeal to justice in this matter.

THE EARL OF SHAFTESBURY, K.G.

THE publication of the Blue Book of the Royal Commission on the Housing of the Working Classes again brings prominently before the public the name of this veteran philanthropist. At eighty-three years of age he was able to bring to the assistance of the Commissioners the experience of a long life which has been mainly devoted to the benefit of his fellow-men. Lord Shaftesbury in early life sat in the House of Commons as a Conservative, but the legislation which he originated and encouraged soon cost him the support of his constituents. Perhaps no enactment of the present century has conferred greater comfort on the working classes than the Ten Hours Factory Act, which limited for them the hours of labour. Lord Shaftesbury's support of this measure was so earnest that he declined to join Sir Robert Peel's Ministry in 1841 because that statesman refused to lend his aid to this Bill. The passing of the Ten Hours Factory Act was the beginning of a long line of enactments regulating factories and workshops, night-work, and the employment of children, all due in great part to his efforts. But while Lord Shaftesbury's life has been devoted to the improvement of all classes of his fellow-men, it is the children of the poor who owe him most. The formation of ragged schools, the precursors of our Board Schools, was perhaps one of the most useful acts of his life. To them we are undoubtedly indebted for the fact that the education of children is now held to be the business of the State. While energetically opposing the engagement of children in dangerous occupations, and while preventing the employment of boys as chimney-sweeps, he has been ready to devise work of a suitable kind by which they might support themselves or add to the earnings of their family. The formation of the Shoeblack Brigade may be taken as an instance of an occupation in which poor boys might be successfully and usefully employed. Upon his encouragement of religious societies and missionary enterprise we need not dwell here; it is sufficient to say that by his many acts of practical benevolence he has done more to

stem the tide of Socialism than any statesman of the century. Upon the work performed by Lord Shaftesbury and those who follow in his footsteps will be dependent in the future, as it has been in the past, the alteration of those conditions which have been so forcibly brought to light by the evidence given before the Royal Commission. Whatever legislation may result from the recent inquiry, there will still be room, and indeed need, for the practical philanthropist, of which Lord Shaftesbury may be taken as the type.

TRANSPLANTATION OF BONE.

WE learn from a lay contemporary that Professor Bergmann, of the Ziegelstrasse Hospital, Berlin, has recently had a successful case of transplantation of bone in the human subject. The operation is not new to science, for Ollier of Lyons and others have shown that in the lower animals portions of bone may be readily grafted on to a freshened surface. As in all other measures taken with a view to the restoration of lost tissues or members, the difficulty increases as the scale of development is ascended, or, in other words, the more highly organised and specialised the elements of a part the less is their tenacity of life. There is a certain amount of energy distributed in the body for growth, development, and repair, with discharge of functional activity. At first sight it seems surprising that transplantation of bone has not been more extensively practised on the human subject. The explanation is simple and ready to hand. In cases of fracture, even with loss of substance from detachment of splinters, nature is full of resources for replacing the necessary material; and again, it is well known that the entire shaft of a long bone may be excised within a few days of its destruction by acute suppurative ostitis, and a new one be regenerated with tolerable certainty. It is not for such cases then that transplantation of bone is likely to be required; but in those more numerous instances where the osseous tissue is eaten away by insidious disease. Unfortunately for the patient, the vitality of the surrounding bone is usually too low to warrant any great hope of the method of extrinsic repair now under consideration. In order that the graft may "take," a rapid vascularisation of the callus is necessary, but in caries the organising power, except in rare cases, is too feeble. Still, there is no telling what surgical science and art may eventually accomplish, and for that reason we look forward with curiosity and interest to the future records of bone-grafting.

ELECTION OF SURGEON TO READING HOSPITAL.

THE election of a surgeon to a provincial hospital is not, as a rule, a subject for comment; but at the Royal Berkshire Hospital, at Reading, there has been such a deviation from the ordinary rule of election, and such marked injustice done to the senior assistant-surgeon to that institution, that some comment is necessary. It was admitted by the chairman of the Governing Committee that no fault whatever was to be found with the manner in which he had discharged his duties during the five years he had acted as assistant-surgeon, and that a testimonial would be given to this effect if required. Surely, under such circumstances, it was but natural and right, and in accordance with precedent at other institutions, that he should pass into the higher position of full surgeon by the general assent and approval of the governors of the hospital, who elected him assistant-surgeon five years ago. But it has not been so. Another medical man, who is in partnership in private practice with one of the surgeons of the hospital and one of the assistant-surgeons (an uncle and nephew), has been elected by the votes of a majority of the subscribers to the hospital to the position of full surgeon, without having filled that of assistant-surgeon. Thus three practitioners in partnership make up half the surgical staff of the Royal Berkshire Hospital. There are some thirty surgeons in practice in Reading. Surely with such a number of medical men the Royal Berkshire Hospital should not be allowed to approach the level of a private institution for the treatment of the sick. The hospital should have a rule that their staff of full surgeons should not consist of men in partnership. When a junior so circumstanced moves from the position of assistant-surgeon to that of full surgeon, the senior should retire. This would give other deserving men an opportunity, and limit the years of office within the period that it is in the interest of the hospital and the patients it should be. Men fully occupied with private practice should not hold *active* hospital appointments, but, both in justice to their fellow-practitioners and in the interest of the patients at the hospital, should pass on into the honorary consulting sphere. In looking over the qualifications of the staff of surgeons at the Royal Berkshire Hospital, we are struck with the fact that only the senior surgeon has the higher surgical qualification which, at such a hospital as this, should be possessed by the whole of the surgical staff. Nothing could be more unjust to the poor who seek aid at the hospital, nor to the subscribers who support it, than for local interest to stand in the way of merit. The time has come for a readjustment of the rules of election at the Reading Hospital.

INTEMPERANCE AND THE DEATH-RATE.

THE recently issued Forty-sixth Annual Report of the Registrar-General shows that the death-rate referred to intemperance in England and Wales, which was considerably above the average in 1881 and 1882, again showed a marked excess in 1883. The annual rate in the three years 1881-82-83 averaged 48 per million persons living; whereas the mean rate was but 38 in the five years 1871-75, and 42 in the five years 1876-80. Now, it is well known that but a very small proportion of the deaths due to intemperance are directly referred to this cause, but it is important to decide whether this marked increase in the proportion of deaths attributed to intemperance may be accepted as trustworthy evidence of increased mortality from alcoholism. The Registrar-General's report gives a satisfactory answer to this inquiry, and expresses the opinion that this increase is "almost certainly attributable simply to more conscientious statement of the cause of death, and not to any real increase of intemperance in the country." It is pointed out that the returns of the Board of Trade show a large diminution in the consumption of intoxicating drinks and also that the last census returns show a considerable decline in the number of persons engaged in the liquor trades. In further support of the assertion that fatal intemperance has recently declined in England, in spite of the increase of deaths attributed to that cause, attention is particularly directed to the marked decline in the deaths referred to diseases of the liver. The fluctuations in the mortality from these diseases afford, it is said, a useful measure of the comparative prevalence of intemperance, inasmuch as medical practitioners who might hesitate to certify intemperance as the cause of death of their patient would have no similar hesitation in certifying a death to hepatic disease. The mortality from diseases of the liver is notoriously excessive among publicans and others engaged in the liquor traffic, and also among those engaged in all other occupations specially exposed to drink temptation. The annual mortality from liver diseases in England and Wales averaged 426 per million living during the ten years 1871-80, having reached its maximum, 466, in 1875, since which it has steadily declined; in 1883 it fell to 370, a lower rate than has prevailed from this cause in any year for

which records exist. The true value of the registered mortality from diseases of the liver as a measure of the prevalence of intemperance seems to deserve further investigation, although there is no reason to doubt that it is for this purpose more trustworthy than the recorded death-rate from intemperance.

ARSENIC IN BURIAL SOIL.

A PAPER, which may have some bearing on hygienic as well as on forensic matters, was contributed to the Académie des Sciences by MM. Schlagdenhauffen and Garnier (*L'Union Médicale*, June 20th). The observations made during the past three years by these authors have led them to some interesting conclusions. Arsenic was found to be disseminated in variable, and often in considerable, quantities in the different soils of the Vosges; the red sand appeared to be the richest in this mineral. Burial-places in such localities are thus made in arsenical soil. Arsenic in these soils probably exists in the form of arseniate of iron, which is but little soluble in boiling water, and altogether resists the action of water at the ordinary temperature, whilst it cannot be taken up by rain-water permeating the soil. Arsenic in aqueous solution, in almost any form, left in contact with a ferruginous clay and chalk soil, in the laboratory is gradually transformed at the ordinary temperature into insoluble derivatives, which are retained by the earth; this transformation is accelerated by the heat of the sand-bath. Any compound preparation of arsenic, even very soluble ones like arseniate of potassium, introduced into a natural soil of the ferruginous clay and chalk sort, and submitted to the action of rain-water at the temperature of the different seasons of the year, behaves in the same manner in the laboratory in contact with a soil of the same nature and with an excess of water. If the preparation be insoluble, it remains so; whilst, if it be soluble, it slowly becomes insoluble, and at such a rate that at a depth of ·60 to ·9 metre beneath the level at which it was placed no trace of it can be recognised at the end of fourteen months. The results thus obtained are corroborative of those made by Orfila in 1847 in connexion with the Nicolas Noble affair, and prove satisfactorily that arsenic cannot be taken up by the subsoil water, and thus brought into contact with a corpse buried in an arsenical soil.

MORTALITY OF INSURED INFANTS.

BEARING in mind the wide-spread and, as it appears to us, well-founded conviction of the dangerous tendency of infant insurance, it is matter for surprise that societies engaged in this branch of insurance have furnished no trustworthy statistics in its justification. Mr. J. J. Ritchie, the medical officer of health of the urban sanitary district of Leek, gives some statistics on the subject which call for notice. It will be remembered that about a year ago this medical officer called attention to the remarkable increase of infant mortality in his town coincidently with the rapid growth of infant insurance. The high rate of infant mortality in Leek in 1884, equal to 186 per 1000 births, appears to have led the medical officer, with the assistance of his sanitary inspector, to investigate the relation between infant mortality and infant insurance. The result of this investigation, given by Mr. Ritchie in his report, shows that while the mean rate of mortality of all infants under one year in the town during the past five years averaged 162 per 1000, the rate among infants of that age insured in the Leek Benevolent Burial Society did not average more than 108 per 1000 during the same period. The subject is so important that the trustworthiness and true import of these figures require careful consideration. From a letter in a contemporary by the sanitary inspector, we learn that during the five years 1880-84 no fewer than 1188 infants under one year of age were admitted to this local Burial Society, of which admissions only seventy became lapsed policies, and the deaths under one year were 105. By the rules of the Society, any member, on payment of a weekly contribution of one penny "at any time after the birth" of the member's child, may insure the payment of a sum of money at the death of such child for his or her funeral expenses. Now, if all these 1188 infants had been insured at the moment of birth, their death-rate, after due allowance for the lapsed or surrendered policies, would have been fairly comparable with the general death-rate of infants in the town. In point of fact, however, the infants certainly were not insured *at* birth; they may have been, and probably were, admitted to membership at all periods of the first year of life up to the eleventh month of age. Therefore none of the insured infants could have been insured a whole year under one year of age, and probably many of them were not insured for half a year. Moreover, the rate of mortality of infants declines so rapidly after the first week of life, that in order to calculate correctly the rate of mortality of insured infants it is absolutely necessary to know the precise age of each infant (in days, or at any rate in weeks) on admission to membership. It would then be possible to elucidate the true rate of mortality of these insured infants. Without this information, it appears to have been assumed that they were all insured at the instant of birth, which is obviously impossible. Without suggesting any criminal intention in infant insurance, the fact that an infant may be insured by the single payment of one penny and the production of a certificate of "healthy appearance" signed by the collector, who is paid by commission, suggests the strongest improbability that the rate of mortality of insured infants can be less than that of all infants. The whole subject requires further and most thoroughly impartial investigation.

MIND.

THE Rev. S. J. Jerram delivered an able and interesting lecture at Ealing a week ago, on Mind, in which an approximately accurate view of the relations of mind with brain function was lucidly expounded. It is satisfactory to note the advance of a theologian towards science. We do not affirm that Mr. Jerram has shaken himself entirely free from the trammels of his professional habit of thought on these subjects, but his position is one which holds out an excellent promise of further progress. He is not prepared to say that "the mind *is* the brain," nor is any scientist prepared to make such an assertion; but he recognises the fact that physiological, as distinguished from purely metaphysical, inquiries are likely to play the most important part in elucidating the mystery of mental phenomena, and he has arrived at the perception that "no state of mind and no change in a state takes place without an act of cerebration;" at the same time making the necessary allowance for the possibility that the consciousness may hereafter be found to be located in the periphery as well as the centre of the nervous system, or diffused through the body as a whole. It is not necessary to point out to the scientific reader that these formulations of thought show a deeper insight into the subject than is common among those who study it from the outside standpoint. The weakest part of Mr. Jerram's argument is that in which he strives to harmonise Locke's hypothesis that the mind at birth is as a blank sheet of paper, upon which anything may be written, with the doctrine of heredity; and in which, of course, he is compelled to assume the undemonstrable proposition, and, as we believe, the untenable position, that ideas are something else than the products of ideation, and that in some unexplained way *intuition* bridges over the chasm between primal agnosticism and consciousness. The logical process to which Mr.

Jerram commits himself obviously necessitates that he should regard the physical organ of the mind as comparable with the cylinder of a phonograph upon which certain marks are impressed; in fact, as an organic or organised record of ideational impressions which forms part of its constitution, and is as much part of the inheritance as the matter itself. When any species of organised matter reproduces its kind, the form in which it is cast is as much part of the inheritance as the matter itself, and it is on this form character and quality depend. An educated cell brings forth as its progeny educated cells; and the education thus reproduced—"in its likeness," or "in his kind"—is something more than mere capacity for function: it is the recorded *result* of function. In this way an evil tree brings forth evil seed. Vice, or, as Mr. Jerram would say, *sinfulness*, is actually transmitted; not merely the possibility or probabilty of sinning, though these are implied. Mr. Jerrams has gone so far that he must needs go somewhat further. Meantime we heartily endorse his conclusion: that which "metaphysics" represents, albeit the term has no precise significance, "the philosophy of mind as distinguished from that of matter..... eventually comes to facts, the nature of which has not hitherto been solved, as all sciences of observation must do; but so long as it does not dogmatise, no danger is to be feared; and when it has reached the point beyond which it cannot go, that for the time is the true system of psychology, and we must patiently wait till further inquiries open out a more extensive field of knowledge."

BROWN-SEQUARD ON ANALGESIA.

Two years ago we placed before our readers some communications relating to a proposed new method of producing analgesia (THE LANCET, vol. i., p. 1071; vol. ii., pp. 512, 598, 1883). The chief fact in connexion with this subject is that almost any irritation of the larynx and upper end of the trachea is said to have the power of depriving the animal of the capacity to feel pain, the whole of the other functions of the nervous system remaining intact. The most powerful agents with which to effect the irritation are carbonic acid and chloroform. Brown-Séquard has continued his experiments on monkeys, and also on his own person. It is difficult to apply the necessary measures to the human being. Some success was obtained by getting an individual to inhale pure air during two-thirds of each inspiration, and then finishing up with chloroform or carbonic acid, which had to be immediately expelled. Sometimes an analgesic effect was produced, but the experiment had to be prolonged for many minutes. On the whole, the results did not seem to be very satisfactory. In monkeys the irritation can be effectually carried out, and then the analgesia is most marked and lasts many days. It is said that there was insensibility to the existence of wounds for as long as ten days.

RESEARCHES IN CHOLERA.

MM. NICATI and RIETSCH have recently published a summary of the results of experimentation in cholera (*Revue de Médecine*, June, 1885). First, they relate experiments made with the blood of choleraic subjects. The subcutaneous and intra-peritoneal injection of the blood excites transitory symptoms, not cholera; whereas the intravenous injection produces cyanosis, algidity, and even death. Such effects are attributed to septic poisoning, and not to an actual transmission of cholera. Secondly, experiments made with the intestinal contents give septicæmic effects on subcutaneous and intravenous injection. Introduction of these matters into the stomach of the dog, pig, cat, and rat, although frequently fatal, does not reproduce cholera even when given to fasting animals, or when the material is previously made alkaline, or after enteritis has been artificially excited. In the intestine they succeeded in exciting cholera after ligature of the bile-duct. Injections into the bile-duct of dogs produced choleriform symptoms and lesions. Similar experiments on the guinea-pig were successful when the material was introduced into the duodenum or stomach, but not when injected into the lower part of the ileum. Thirdly, experiments were made with bile from cases of cholera. This secretion was found to contain comma bacilli, and its injection into the bile-duct of the dog caused death in one or two days with symptoms of cholera and a reproduction of bacilli in the intestine. It is concluded that guinea-pigs are susceptible of inoculation through the stomach, and more surely through the duodenum; that the dog may be inoculated by injections into the bile-duct; that only those materials transmit cholera which contain comma bacilli—i. e., intestinal contents and bile, whereas the injection of blood from cholera subjects, whether into the veins or subcutaneously, only produces poisoning.

CRICKET FOR GIRLS.

THE announcement of a cricket match between an eleven of ladies and an eleven from a girls' school has caused an apprehension in the minds of some of the risk to which feminine players are exposed. One correspondent points out the consequences likely to ensue from a blow received on the breast from a cricket ball, either delivered from the bowler's hand or struck by the bat. Doubtless a severe blow on the breast might lead to serious consequences in fully developed women by excitation of any latent tendency to cancer, and in young girls by arresting development of the mammary gland. Still, we think, the risk might be reduced to a minimum if the feminine players wore a well-padded corset both in the field and at the wicket. We should regret that a game, really well suited as an exercise for girls, should be discouraged simply on account of a risk that could be guarded against. We have repeatedly in our columns advocated the advantages to be gained, in the physical education of girls, in the introduction of a well-regulated and moderate athleticism—by allowing them to join in pastimes at present mostly limited to boys, such as swimming, rowing (not boat races), and cricket. The thorough development of the female frame which such exercises would induce, would, we are sure, do much to diminish the tendency towards the special diseases which so many women suffer from in after-life. One positive advantage would be gained by the abolition of tight stays and high-heeled boots, which would be impossibilities for young ladies who wished to enjoy athletic pursuits even in moderation.

EXPERIMENTAL TYPHOID FEVER.

A SERIES of communications has appeared in the *Gazette Hebdomadaire des Sciences Médicales* (ending June 20th), entitled "Observations on the Microbe of Typhoid Fever." The paper is a contribution to experimental medicine by M. Tayon, and consists of statements on the results of cultivation and inoculation of the alleged micro-organism of the typhoid fever of man. Poorly executed woodcuts accompany the text. The chief object of the paper appears to be to show that the common pig is proof against the microbe taken from the blood of a man suffering from typhoid fever. Pigs, even from their earliest age, can withstand the effects of peritoneal inoculation of the typhoid poison in doses which kill adult rabbits. The author regards it as remarkable that an animal which is most liable to ingest human excreta should be unable to exhibit the phenomena of typhoid fever. He looks upon this immunity

as having been acquired in long past time, and as necessary for the propagation of the porcine species. We gather that the author contends that he has cultivated the human micro-organism in rabbits and guinea-pigs, and further believes that it will be possible to render these animals free from the ravages of typhoid fever by inoculating them with an attenuated virus. M. Tayon's aspirations rise to the height of vaccinating human beings to protect against typhoid fever.

THE HOUSING OF THE WORKING CLASSES.

DR. SIMPSON, medical officer of health for Aberdeen, stated in his evidence before the Royal Commission on the Housing of the Working Classes that a clause in the Aberdeen Corporation Act of 1881 gives powers to the Corporation to summarily close houses which are certified by the medical officer of health to be unfit for human habitation. Fifty-five houses have thus been closed since August, 1881, and the effect of the Corporation possessing these powers has been that house-owners are easily compelled to maintain their property in a state of repair. This is a very valuable power, and one which is much needed in London. Torrens's Act enables the vestries and district boards to enforce the repair or demolition, but not the closure, of houses, and the proceedings are very tedious, and a house in a very insanitary condition may be inhabited for a considerable period before the order can be carried into effect. Under the Nuisance Removal Act the power to close houses is given, but it is necessary to serve a notice specifying the work which is required to be done before the magistrate's order can be procured, and the magistrate can only require the remedy of those defects which are technically known as "nuisances." It is possible, therefore, for the house to continue to be unfit for occupation, although the order has been complied with. Another power possessed by the Aberdeen Corporation is that of fixing the minimum cubic space for each person in a dwelling-room. Dr. Simpson regarded the absence of a stated minimum as a defect in the Public Health Act, and there is much reason for this view; it must, however, be recollected that local authorities have all the necessary power under the 90th section for making regulations for this purpose.

IS ACETONÆMIA THE CAUSE OF DIABETIC COMA?

CONTRARY to the observations of Patters in 1857, whose views have been accepted by subsequent authorities, Albertoni, writing in the *Rivista di Chimica, Medica, e Farmaceutica*, endeavours to show that acetone is not the poison which causes death in diabetic patients. Indeed, when administered by the mouth it is, if pure, less poisonous, he states, than ordinary ethylic alcohol. The phenomena observed in diabetic coma are by no means always similar to those produced by acetone. He gave large doses (100 grammes) of glucose to rabbits, but could detect no acetone in the urine. Isopropylic acid is partly changed in the organism, acetone being formed; part of the acid is, however, passed unchanged. In man, when a dose of six cubic centimetres is given by the mouth it is detected unchanged in the urine. Aceto-acetic ether does not produce symptoms of diabetic coma, but it does cause albuminuria and hæmoglobinuria, and is certainly eliminated in an unaltered condition. From previous researches it seems evident that aceto-acetic acid often exists in diabetic urine, its presence being detected by the red colour given with perchloride of iron if the urine is not boiled or treated with an acid. This acid is well borne by the organism, and cannot be the cause of severe poisoning. The condition which governs its appearance in the urine is the reaction of the urine and that of the renal parenchyma. If the urine is acid, the aceto-acetic acid is decomposed, forming acetone; but if alkaline, neutral, or slightly acid, the aceto-acetic acid is found unchanged. This is the explanation of the discordant observations on this subject. It is probable that the formation of aceto-acetic acid explains the presence of albumen, which is sometimes observed in diabetes. Crotonic acid, the formation of which in diabetes was demonstrated by Stadelmann, cannot be considered as poisonous, two grammes producing no effect on rabbits. Crotonic aldehyde is, on the other hand, highly poisonous, even in small doses, four drops producing in a rabbit dyspnœa, and even narcosis, with the exhalation of an odour resembling crotonic aldehyde and other phenomena which are described by Kussmaul as present in diabetic coma. Large doses caused powerful disturbance and rapid death, with epileptiform convulsions.

ABERDEEN ROYAL INFIRMARY.

THE question of admitting cases of infectious fever into the wards of the Royal Infirmary at Aberdeen has been recently under the consideration of the managers. The Rev. J. Calder moved, "That it is inexpedient that the infirmary should continue to relieve the local authorities of the city of Aberdeen and its neighbourhood of any part of the public duty and obligation laid upon them by the Public Health Acts, of making adequate provision for fever and other infectious diseases." This motion was adopted by Dr. Struthers as an amendment to a resolution moved by Dr. Urquhart, referring the matter to the Committee of Management, "to inquire and report what arrangement can be made with the local authority in the matter of fever patients." Dr. Urquhart contended that there was not sufficient reason why the infirmary should not continue to receive such cases as hitherto; but Dr. Struthers pointed out that if they retained the treatment of fever and infectious diseases, they would not have room for the extension which was necessary for the general hospital. After a long discussion, in which a general feeling was expressed that the advice of medical authorities should be taken, the Court divided, and Dr. Urquhart's amendment was carried. Although, from an educational point of view, it would be desirable to continue the practice of admission of fever patients, yet, if no means are available for completely isolating them from communication with the general cases, it would be preferable to exclude scarlet fever from the infirmary. There is not the same objection to typhoid fever, which is, as is well known, very freely admitted into general hospitals without risk of infection.

ABSINTHE.

THE advocates of the Permissive Bill will hear with satisfaction that General de Courcy has just prohibited the importation of absinthe into Tonkin. Though the French troops are remarkably sober as compared with the armies of the more Northern races, there can be no doubt that absinthe has wrought much mischief in France, and still more in the French colonies. The spirit in itself is not perhaps as injurious as its enemies would lead us to believe. It is a fashion to decry absinthe; yet the nations where absinthe is the customary daily beverage are far more sober than those countries where this particular drink is unknown. The fact is that absinthe is far more insinuating; it is more easy to contract the habit of drinking absinthe. Many persons who could easily resist the allurements of ordinary spirits, yield to the more subtle temptation of absinthe. Then it is refreshing, and stimulates the appetite; qualities highly appreciated in hot climates. Further, it is a social institution. The "hour of the absinthe" is the moment *par excellence* of relaxation; the time for the friendliest, the most confidential conversations. To extirpate from the daily life of the soldier this one happy hour proves that

General de Courcy is a remarkably bold and rigorous commander. Perhaps if he would display equal severity in enforcing personal cleanliness among the troops under his command, the result would be even more advantageous. To maintain the health of the French army, general sanitary measures, good drainage, good ventilation, good baths, are more urgently needed than a temperance crusade against some one particular form of stimulant.

A DUTCH SURGEON ON ASPIRATION OF THE BLADDER.

DR. H. P. KAPTEIJN writes to a Dutch medical journal strongly in favour of the practice of aspiration in retention of urine where a catheter cannot be passed, giving cases illustrating its advantages. (1) A man of seventy-nine, who had had difficulty in passing urine for eight or nine years, the stream having latterly become very thin and at times only drops passing, found himself suddenly unable to pass any at all. Dr. Kapteijn with great difficulty succeeded in introducing a very fine elastic catheter, which drew off a large quantity of urine tinged with blood. The next day all attempts to pass an instrument failed. Aspiration was performed about two centimetres above the symphysis and 500 cubic centimetres of urine, mixed with blood, withdrawn. The aspiration was repeated twice daily for nine days, the urine becoming gradually clearer and the quantity drawn off each time being about the same as at first. All the punctures were made within an area the size of a dollar, and except an induration of the skin and cellular tissue, there was no bad effect from the numerous operations. For the next six days it was found possible to employ catheterisation, after which time neither the writer nor another medical man whom he called in were able to pass an instrument; aspiration was therefore again resorted to twice a day. After the third day the patient succeeded in passing a thin stream and has not again required either catheterism or aspiration. (2) A man aged seventy, who lived at a great distance from the doctor, became all at once unable to pass a catheter for himself, as he had been obliged to do for the past seven years. The author was unable to pass an instrument, though he tried many of different sizes and forms, false passages being the reason of the difficulty. Aspiration was therefore performed. The next day, as circumstances rendered frequent repetition of the operation impossible, the bladder was tapped per rectum and an elastic catheter fastened in. After a time, the false passages having closed, an instrument was passed per urethram and the rectal wound allowed to heal. The author points out that by aspiration the first patient was saved the unpleasant operation of rectal tapping, and that if circumstances had allowed, the second patient might also with advantage have been similarly treated.

EXPERIMENTAL SEPTICÆMIA.

THE most recent contribution to the experimental investigation of septicæmia is to be found in the current number of Virchow's *Archiv*, in a paper on "Putrid Intoxication," by Prof. Blumberg of Kasan. He remarks that most varying statements have been made as to the symptoms and lesions of artificial septicæmia, and it was with the object of testing their truth that he undertook a research which comprised the subcutaneous and intravenous injection of blood and flesh in a state of putrefaction. The effects of such injection were closely observed, both clinically and pathologically, the records of temperature and pulse-rate being accurately kept. The material employed was the blood and flesh of the dog; and the animals experimented upon included the dog and rabbit, chiefly; and also the horse, sheep, cat, mouse, pigeon, and sparrow. The result of this extended inquiry was to show that, both as regards symptoms and pathological lesions, the effects of inoculations with the same putrescent material vary considerably, the only constant symptoms being extreme asthenia, heightened temperature (or if the dose be very strong, a lowering of temperature), acceleration of the pulse and respiration rate; and the only common pathological change was an alteration in the properties of the blood. Granular degeneration of the cardiac muscles and of renal and hepatic cells, although occasionally produced, is not a constant lesion, nor did Blumberg find, as some have, fatty metamorphosis of the ganglion cells of the brain with areas of round-cell infiltration. A remarkable and somewhat unexpected statement is that the blood of animals destroyed by putrid intoxication contains no bacteria, a proof probably that the symptoms are due to a chemical poison and not to bacterial invasion. He explains the differences of authors upon the subject partly on the kind of putrefying material employed and the mode of its administration, whether subcutaneous or intra-venous, and partly by delay in the examination of affected animals.

THE UNIVERSITY OF LONDON AND ITS MEDICAL DEGREES.

ON Wednesday last a deputation from the Metropolitan Counties Branch of the British Medical Association, consisting of Dr. Bristowe, Mr. Morrant Baker, Mr. Pearce Gould, Mr. Hutchinson, and Mr. Macnamara, had an interview with a committee of the Senate of the University of London to discuss certain proposals to widen the portals of the University for medical graduates. The subjects raised were in the main three. It was suggested that the requirements at the matriculation examination might be slightly reduced, a wider limit in the choice of subjects being granted to the candidate. In reference to the preliminary scientific examination, it was pointed out that the Senate had already arranged for the examination to be held twice a year, and for the subjects to be arranged in three groups, any two of which could be taken up separately; the deputation uged that, in addition, when a candidate presented himself in all three groups of subjects and failed to pass in one only, he should merely be required to pass in that group of subjects at a subsequent examination. The deputation also asked that facilities should be given to men who had finished their medical curriculum to obtain the degree of the University by merely passing the requisite examinations, and without being compelled again to go through the curriculum. It was also pointed out that a greater uniformity in the standard of examinations was most desirable.

A BIOLOGIST'S VIEW OF THE CHOLERA BACILLUS.

THE current number of the *Nineteenth Century* contains a contribution from Prof. Ray Lankester, entitled "Recent Progress in Biology." It deals with but three topics, viz.—First, Mr. Caldwell's discoveries among the monotremes and ceratodes; secondly, the comma bacillus; and thirdly, the foundation of the Marine Biological Association. It is needless to say that the article is interesting; and the criticism upon the comma bacillus is almost as trenchant as the Professor's letters to *The Times* and *Pall-Mall Gazette* last year. For time has not effected any change in Professor Lankester's opinion that Dr. Koch has been rash, and something more, in coming to the conclusion that the comma bacillus is the cause of cholera. He asserts that Koch neglected to ascertain whether similarly shaped organisms were present in the digestive canal in health and in various diseases, as subsequently shown by Lewis, Finkler, and Prior, and declares that the discrepancies between the statements of Klein and Watson Cheyne are due to the fact that there are "two, or possibly three," kinds of comma bacillus in the healthy human mouth, one only of which may be identical

with the comma bacillus. That cholera can be produced in guinea-pigs by administration of the comma bacillus is held to be not proved. Lastly, Professor Lankester points out that the comma-shaped bacteria are really fragments of vibrio and spirillum, that they "are found by Dr. Klein in abundance in the intestines of healthy guinea-pigs, they occur in old cheese and in the stagnant water of foul yards, as well as in the human mouth and intestine in health and disease. They are of various sizes, and of different kinds or species. Some liquefy gelatine, others do not, but inasmuch as many bacteria liquefy gelatine in the same way as that described by Koch in the case of his comma, it is not possible to regard this as a remarkable property; certainly not as sufficiently remarkable to lead us to suspect the comma possessing this property of also producing cholera." Such may be taken to be the biological view of the nature of this now famous organism; but it is hardly to be expected that either Dr. Koch or his numerous followers in pathological inquiry will accept the conclusions arrived at. For they may still contend that morbific qualities are not indicated by morphological characters; and if, as they hold, it be true that the nature of the disease harmonises best with the assumption of its dependence on a specific microbe, it is difficult to see how their contention is to be refuted on biological grounds alone.

HOSPITAL NURSING AND SECTARIAN SISTERHOODS.

THE soundness of the axiom which compares a hospital to a small but self-contained republic is once more demonstrated. The practical wisdom of the contention that an *imperium in imperio* is unworkable is finally established. Twenty-five years ago—that is, nearly five years before the publication of Miss Nightingale's book—University College Hospital, like every other hospital in this country, and indeed throughout the world, suffered from bad nursing. Neither the right women nor the right training was forthcoming, and the lot of hospital patients was not a happy one. Indeed, the managers of every hospital who desired to have good nursing and sound administration throughout their institution were at their wits' end to know what to do and how to obtain the fulfilment of their laudable desires. Amongst the number was University College Hospital, and the difficulty was overcome by a tentative arrangement with some ladies in communion with All Saints' Church, Margaret-street, by which the nursing of a certain number of beds was, for a limited time, placed under their care. At the end of some months the medical staff expressed great satisfaction with the new nursing arrangements, and asked for the extension of the system to the whole hospital. The reports being still satisfactory, after a few years' trial, the services of the matron engaged by the Hospital Committee were dispensed with, and an agreement was entered into between the Hospital Committee with the sanction of the Council of University College, and the All Saints' Sisterhood, Margaret-street, an organisation in union with the Church of England and belonging to what is known as the ritualistic party. All that the Council of University College stipulated for was that the nursing should be of the best, and that the sisters and those working under them should in no way interfere with the individual religious views of the patients, the Sister Superior being held responsible for the faithful maintenance of this condition; whilst every patient was to be allowed to have the attendance and ministrations of any minister of religion, or of any scripture reader or other authorised representative of such minister that he or she might prefer. The Hospital Committee agreed to pay the Sisterhood so many hundreds a year for nursing the patients, the present yearly grant being about £2000. Throughout the whole period of twenty-five years during which the All Saints Sisters have had charge of the nursing of University College Hospital they have given the greatest satisfaction, and the sisters and those under their control are reported to have loyally adhered to the obligations enjoined upon them by the original agreement. One possible source of misunderstanding seems, however, to have been overlooked. From a correspondence lately published in the *Daily News*, it appears that no woman can be trained as a nurse at University College Hospital except under the auspices of the sisterhood, which requires that all nurses, even probationers, shall be members of the Church of England. Not only so, but we are further assured that it is the custom of the sisters to indoctrinate the nurses with Church principles, which include the preparation for confirmation and for habitual confession. With the anxiety which this discovery must have caused the Council of the College and the Hospital Committee all must cordially sympathise, and the result of their inquiries will be awaited with interest.

OBSTETRIC DEGREES.

THERE is a disposition to specialism in diplomas as well as in practice. The examining bodies find it apparently to their interest to multiply their qualifications. Often the distinction in the examinations is either little or nothing. But a separate fee accrues to the examining body, and a distinctive title to the person paying the fee and complying with the other conditions of the body granting the diploma. We are of opinion that a very sharp look-out should be kept on this tendency to multiply qualifications. It not only tends to whet the commercial appetite of the bodies for traffic in titles, and to feed the vanity of the possessor of the new title or diploma, but is likely to mislead the public as to the special qualification of the individual in question. One thing we have a right to demand, that every new diploma shall imply extra professional knowledge and accomplishment, and that very real tests of these shall be applied to the candidate. An interesting correspondence has been sent to us between Dr. Charles Frederick Knight and the Standing Committee of the Royal University of Dublin on the regulations for obtaining the new Degree in Obstetrics of the new university. Dr. Knight suggests to the Senate that in the rule requiring twenty "attendances" on cases of labour, the word "conductions" should be substituted for "attendances." Perhaps the meaning of both Dr. Knight and the committee is the same. But the point requires elucidation, and the question serves as an illustration of the importance of some public authority like the Medical Council having the power to say what constitutes a special test for the gift of what purports to be a special diploma.

MEDICAL MISSIONARIES.

THE Church Missionary Society have arranged to locate the recently accepted medical missionaries as follows—Dr. F. J. Harpur of Trinity College, Dublin, in Aden; S. T. Pruen, M.B. Dur., in Eastern Equatorial Africa; Henry Martyn Sutton, L.R.C.P. Lond., in Baghdad. A brother of the last-named gentleman, Samuel Walter Sutton, M.D., B.Sc. Lond., has also been accepted, but his location has not yet been decided upon.

An American medical missionary, Dr. Allen, who settled some time ago in Seoul, the capital of the Corea, has commended his cause to the authorities so much by his skilful treatment of numerous officials who were wounded in the recent insurrection, he himself remaining at his post when all other foreigners had removed out of danger, that the Government is now going to establish a hospital for him.

THE GORDON MEMORIAL.

AT a meeting of the Mansion House Committee of the Fund for providing a National Memorial to General Gordon, which was held on the 1st inst., it was unanimously resolved, upon the motion of the Prince of Wales, that the proposal of creating a Gordon Boys' Home be adopted. A Subcommittee having been appointed, it was recommended that the Memorial Institution shall be called the Gordon Boys' Home; that it shall train boys of the age of fourteen, and between fourteen and eighteen, for military or civil life according to their capabilities and inclinations; that the training shall comprise elementary education and instruction in trades and industrial pursuits; and that discipline on military principles be maintained. The Committee also recommended the commencement of the Home on a small scale for the accommodation of about fifty boys, and that preliminary inquiries be made for acquiring a piece of land suitable for the purpose. A considerable sum of money having been received while it was anticipated that the memorial would be a British Hospital at Port Said, it has been decided that any donations that have been sent to the Mansion House to promote that hospital shall be reserved accordingly, if the donors intimate to the Lord Mayor their wish to that effect. The English Committee of the British Hospital at Port Said have, it seems, resolved to proceed with that work, having due regard to the suggestions of the officers who reported upon it, and it will still be associated with General Gordon's name and memory, though not in so prominent a degree as if it had been completed as the national memorial. The fund now amounts after payment of all expenses to £18,031.

DECREE OF INTESTACY.

THE case of Warburton *v.* Childs, Hobson, and Moss (the Council, President, and Fellows of the Royal Society cited), recently decided in the Probate Court before Mr. Justice Butt and a special jury, is important both as regards the testamentary capacity of a paralytic and the implication of a perfectly innocent Society benefiting by a will obtained by the fraud of a third party. The testator, Mr. Warburton, had been a commercial traveller, and had by business pursuits amassed a fortune of something like £35,000. During the later years of his life he seems to have taken a leap in the social scale by changing his former occupation and mode of living for residence in the Alexandra Hotel and the Junior Athenæum Club. As Mr. Justice Butt pointed out, the testator, by virtue of this acquired position, naturally kept his poorer relatives at agreeable distance. At the same time it by no means followed that there was open hostility declared against them. In fact, with the exception of the case of one nephew, there was no evidence to show that there existed any family alienation. In November, 1880, Mr. Warburton was attacked with apoplexy, followed by paralysis of the legs, and it was after the onset of his malady that the several wills and codicils were executed. A round sum was bequeathed to the Royal Society, and the defendants in the present suit were made residuary legatees, only one legacy of about £5000 going to a nephew. From the evidence it appears that Moss, who acted as professional adviser to the testator, received a larger bequest by each successive codicil, and, further, that he took occasion to hide from Childs and Hobson—friends of the testators—the fact that he was included amongst the residuary legatees. In the end the jury found for the plaintiff against all the defendants, holding that Moss obtained the will and codicils by fraud, and that the testator was not capable of framing a sound document, and did not know and approve of the contents of the will and codicils. The result is that on the declaration for intestacy made by the judge, all moneys distributed under probate of the wills and codicils will have to be refunded by the defendants. The Royal Society will lose their bequest, but their costs of the issues on which they have succeeded will have to be paid by the defendants.

THE BATHS OF BATH.

ENCOURAGED by the success that has attended their efforts to improve the accommodation for invalids resorting to Bath for bathing purposes, the Corporation of that city have determined to enter upon further improvements. With that view the City architect, Mr. C. E. Davies, has recently paid a visit to some of the most esteemed European baths in order to observe the most recent improvements, so that they may be applied to the new and enlarged system of baths that the Corporation intend to erect. Although Bath seems already well supplied with bathing accommodation, especially since the establishment of the baths directly connected with the Pump Room Hotel, still, as a matter of fact, so great was the number of bathers last year that considerable inconvenience was at times experienced for want of sufficient accommodation; and this pressure is likely to continue, since balneo-therapeutics are again attracting the attention of the medical profession in this country. The old baths of Bath have long been noted for their luxurious accommodation and the immense volume of water supplied to each; but whilst in this respect they are unequalled, they have not kept pace with the times with regard to douching arrangements, especially the application of special douches, though in this respect many improvements have certainly of late been introduced there. Still, considering the important part played by the douche as an adjunct to the bath, probably in acting as a gentle form of massage, much remains to be done, and the creation of new baths will afford an opportunity for their introduction. Quite a new spirit seems to have fallen on the Corporation, and now that the City is placed within a two and a half hours' journey from London, with a bathing establishment rivalling any in Europe, together with the improvements recently effected in the town itself, we may hope to see Bath restored to a position equal to that she held at the end of the eighteenth century.

THE PROSPECT OF MEDICAL LEGISLATION.

THE political crisis has dispelled every chance of Medical Legislation for the present. There were some indications of a disposition on the part of the late Government to introduce a Medical Bill, but we cannot pretend to regret that this question is for the present in abeyance. Parliament hitherto has shown itself singularly incapable of dealing with it in a satisfactory way. It remains to be seen how a reformed Parliament will treat so many rival medical authorities.

NEW REACTION FOR DIGITALINE.

THE difficulty of distinguishing by chemical methods between various alkaloids has always been very great. This difficulty, where forensic matters are concerned necessitates in many cases the employment of vivisection in order to subserve the ends of justice. Digitaline may be certainly recognised chemically by the following method, according to M. Lafon: If a trace of digitaline be treated with a mixture of sulphuric acid and alcohol, of each one part, and if to this mixture a drop of ferric perchloride be added, a beautiful greenish-blue colouration is developed, which lasts for several hours. The most favourable conditions for the reaction are the following:—Use a very small quantity of digitaline; dry the substance with a very small quantity of the mixture of sulphuric acid and alcohol, and warm slightly

until a yellowish tint appears; then add the drop of ferric perchloride, which should be allowed to spread out. This reaction is peculiar to digitaline, for M. Lafon has tested the whole of the alkaloids and glucosides usually employed in therapeutics. Morphine produces with ferric perchloride the blue colour, but this only occurs where the reagents are neutral. Digitaline prepared at Darmstadt by Merck, neither in its crystalline nor in its powdered condition, gave the above reaction; so that there is a marked difference between some German digitalines and the French alkaloids, a difference which is said to be shown in the varying solubility of the alkaloids as well as by the physiological effects. Chloroform dissolves but little of the German alkaloids. MM. Laborde and Duquesnel have recently pointed out the different physiological effects of digitaline according to the source of the alkaloid.

NEW WORKHOUSE INFIRMARY AT HAMPSTEAD.

ON the 25th ult. a new workhouse infirmary was opened at Hampstead by Mr. J. S. Fletcher, J.P., chairman of the board of guardians for that parish. The new building, which adjoins and is in direct communication with the workhouse at New-end, and is an addition to the previously existing infirmary wards, has been erected on the circular-ward principle, advocated by Professor Marshall. The three circular wards, which are light, airy, well ventilated, and warmed, each contains twenty-four beds, and there is an upper storey containing fifteen nurses' bedrooms, with necessary offices. The building also comprises a receiving-room, accommodation for the officers, &c., and each ward has a bath-room, and necessary sanitary and other appliances, on the most complete scale. The total cost of the site, building, connecting corridors with the workhouse, and new storey to the latter, has been £15,000. The Hampstead Board of Guardians is the first parochial authority in Great Britain to adopt this system for infirmary purposes.

HEALTH AND RECREATION FOR POOR CHILDREN.

AMONG the kindly things devised by charitable men and women, none is more worthy of praise and support than the attempt to secure for children pent up in towns a complete day's holiday in the country, if not more. In some districts churches are trying the plan of giving a number of children a week or two in the country. Our contemporaries publish lists of names representing such schemes. In the name of religion and of medicine alike, we commend them to our readers. Nothing will conduce more to the enjoyment of their own holiday than thus to be the means of promoting holidays for others.

ABSCESS OF THE BRAIN.

AT a meeting of the Medical Association at Hamburg, held on May 5th, Dr. Schede related some surgical cases from the General Hospital of that city. One of the most interesting was a case of cerebral abscess which recovered. The patient was admitted on Jan. 11th with septicæmic symptoms, and a foul purulent discharge from the left ear. Trephining of the mastoid process evacuated some pus; but on Jan. 29th there occurred paresis of the right (*sic*) facial nerve with amnesic aphasia, pain in the vertex, œdema, and fever. After removal of a large portion of the squamous bone, the exposed dura mater was found to be discoloured, and an incision into it gave exit to a quantity of foul pus. The abscess was washed out with sublimate solution and the wound closed. In spite of a relapse, the patient left the hospital cured at the end of March, and remained well, although easily affected by work. Dr. Schede remarked on the difficulty of diagnosing cerebral abscess, and on the capacity for regeneration of the cranial bones, relating a case of marked repair after extensive caries of the skull in support of this fact, which has hardly received sufficient recognition.

"MANUFACTURING PAUPER LUNATICS."

UNDER this sensational heading a contemporary reports the proceedings at the last meeting of the Visiting Committee of the City of London Lunatic Asylum. A member seems to have alleged that lunatics are manufactured at Stone by association of the sane with the insane. What business have "sane" persons in an asylum? The member who made the allegation that there are sane patients in the City Asylum ought to be called upon to substantiate the statement thus made. This is clearly a matter in which only a medical opinion can be trusted. The committee had better commission some independent medical men to examine the inmates of their asylum if they cannot trust their own able and enterprising medical officer, Dr. Jepson. The notion of a *public* asylum being blocked up with sane patients is so novel that we should like to see the inquiry threatened fairly instituted. Dr. Jepson would be relieved to find that his patients were sane and to be able to get rid of them.

THE HOSPITAL SATURDAY FUND.

WE are glad to see indications that the executive of this Fund are not wedded too much to precedent, but are introducing various innovations with a view to making the result more worthy of the working classes. One change this year will consist in having the ladies' street collection on July 18th, instead of in September as hitherto. The cab-drivers, too, out of gratitude for benefits received at hospitals, are going to don the colours of the Saturday Fund and become collectors on the same day. The workmen's contributions, the main source of the Fund, will be payable as before in September.

WAS MRS. DUDLEY INSANE?

IT may be the fact that the would-be murderer of O'Donovan Rossa was insane; but, if so, the evidence is either not forthcoming or happens to be unknown to us. That the deed was done—or attempted—under a distorted sense of duty we do not doubt; but distorted senses of duty, misguided and mischievous though they may be, do not necessarily constitute madness. There is a growing tendency to regard the plea of insanity as a ground for excusing crime or avoiding its punishment. It is impossible not to feel that this practice is doing harm, and ought to be checked.

THE presence of cholera in an epidemic form in Spain has induced the Public Health Committee of the Aberdeen Town Council to put in force the precautions adopted last year to prevent the introduction of the disease into the United Kingdom.

THE Academy of Sciences, whose turn it is this year to award the Institute's biennial prize of 20,000 fr., has pronounced in favour of Dr. Brown-Séquard. M. de Brazza, the African explorer, was amongst the competitors.

DWELLINGS OF THE PEOPLE.—At a meeting of the Executive of the Mansion House Council for the Dwellings of the People, held on Wednesday in the Long Parlour, the following gentlemen were appointed a Law and Parliamentary Committee:—Sir Bernhard Samuelson, M.P., Mr. S. Morley, M.P., Dr. G. B. Longstaff, Messrs. J. H. Allen, J.P., T. Eccleston Gibb, John Hamer, John Hole, Shirley Murphy, D. F. Schloss, and D. Keith Young. Mr. Francis Peck is Chairman, and Mr. E. Lewis Thomas, M.A., Secretary.

Pharmacology and Therapeutics.

FLINDERS' DISPENSING CHLORODYNE.

THIS preparation contains in each drachm one grain of extract of opium, ten minims of chloroform, and three minims of Scheele's hydrocyanic acid, with in addition, we presume, aromatic and flavouring agents. It differs somewhat from most of the chlorodynes commonly sold, which contain about two grains and a half of muriate of morphia in the ounce. It is said to be diaphoretic, sedative, antispasmodic, and astringent. It mixes readily with water and will be found useful for dispensing purposes. The dose is from five minims to half a drachm.

LIQ. EUONYMIN ET PEPSINE CO.

This, as its name indicates, is a liquid preparation containing pepsin and euonymin. We have examined it and find that it exerts some action on albumen. We have also tried it chemically in cases of dyspepsia associated with constipation, but have failed to obtain satisfactory results. We always understood that pepsin should be taken with food or immediately after a meal, whilst euonymin is most advantageously given at bed-time. We are somewhat at a loss to perceive the advantage of the combination, but there may be cases in which it does good.

COCAINE TABLOIDS.

We have received from Messrs. Burroughs and Wellcome specimens of their new cocaine tabloids. We have been at some pains to obtain a very thorough and complete report of their physiological action and therapeutical uses, and believe that they constitute by far the best means of administering this valuable remedy. When injected hypodermically they give rise to no irritation, and they may be introduced into the eye or applied to any mucous membrane with confidence. The anæsthesia they produce is so complete as to admit of the performance of even serious operations without pain. They are far superior to any solution of cocaine, and their introduction has been the means of removing the great difficulty hitherto experienced in the use of this important drug.

CIMMAROMA AS A LAXATIVE.

Dr. Peckholt of Rio Janeiro finds that the pulp of the cimmaroma, a plant found both in the Brazils and in Spain, is valuable as a laxative, ten grains of the alcoholic extract being sufficient to produce an action of the bowels. Mixed with vinegar and water it is used by the natives of Brazil for erysipelas.

EXTERNAL APPLICATION OF CHLORAL IN NIGHT SWEATS.

In order to relieve the distressing night sweats in phthisis and other diseases, Nicolai strongly recommends a lotion made by dissolving two drachms of hydrate of chloral in a pint of brandy-and-water in equal proportions. With this the patient is to be sponged. He finds this method very valuable in children, whether they have phthisis or not.

ALETRIS FARINOSA.

This plant, which belongs to the order of the lilies, has been used for a long time in South America for pleurisy and all kinds of cough. It contains a bitter principle, which is a tonic in small doses and a powerful emetic and cathartic in large doses. Drs. Duncan and Johnston have employed the drug in a large number of cases of dysmenorrhœa, amenorrhœa, and menorrhagia with much success, and they regard it as a powerful uterine tonic, far superior to the other remedies employed in uterine disorders. They have used a fluid extract in ten-minim doses three times a day. It has been found to be useful in certain cases of sterility.

ERYTHRINA CORALLODENDRON.

Brazilian doctors employ the bark of this leguminous tree in cases of insomnia, asthma, whooping-cough, hysterical neuralgia, congestion of the liver, and elephantiasis Arabum. Its chief action is a sedative one on the nervous system. It is administered in the form of a tincture in the dose of one to two grammes a day, and as a fluid extract in doses of two to four grammes.

VIBURNUM PRIMIFOLIUM.

Drachm doses of the fluid extract of the bark of this plant have been employed by Dr. Herr of Philadelphia in cases of dysmenorrhœa. It is administered during the whole of the menstrual period. The results are said to be most marked when the uterus is not flexed or displaced.

ANISIC ACID.

Anisic acid is formed by the oxidation of oil of anise. It is a new antipyretic having antiseptic properties. It has a feeble tonic action, and increases arterial tension. Injected into the veins of animals in large doses it gives rise to epileptiform convulsions. It is also vaunted as a dressing for wounds when used in its pure state.

SUGAR IN PHTHISIS AND DYSENTERY.

Dr. Vildosola, of Cuba, in a Habana medical paper, states that cane sugar is valuable as a diet in consumption and chronic bronchitis; also in dysentery, and even in dyspepsia. He says that dysentery which cannot be controlled by ipecacuanha and other remedies is frequently found to yield to sugar cane in a state of fermentation when chewed.

A REFORMED UNIVERSITY OF LONDON.

THE following is the draft scheme, for the constitution of the University, passed by the Special Committee of Convocation of the University of London on the proposals of the Association for Promoting the Establishment of a Teaching University for London. It will be submitted to Convocation at a special meeting this month, probably on the 21st, and if passed, will so alter the University that the rival scheme for a Teaching University will have no *raison d'être*.

The Committee recommends that the University should consist of:—1. Senate. 2. Convocation. 3. Constituent Colleges. 4. Faculties. 5. Boards of Studies. With the Queen as Visitor.

1. *Senate.*—To consist of Chancellor and Vice-Chancellor (to be appointed and retain office as at present); the Chairman of Convocation *ex officio;* and not more than thirty ordinary members (including the Vice-Chancellor), of whom six shall be nominated by the Crown, six shall be elected by Convocation, three shall be elected by each of the four faculties; and if and when the following bodies respectively shall become constituent colleges, one shall be nominated by the President of University College, London; one shall be nominated by the Principal of King's College, London; one shall be nominated by the President of the Royal College of Physicians of London; one shall be nominated by the President of the Royal College of Surgeons of England; one shall be nominated by the Chairman of the Council of Legal Education; one shall be nominated by the President of the Incorporated Law Society. The nominating bodies to determine for themselves on what recommendation the nominations shall be made. One-third of each of the groups of six and three members of the Senate to retire each year, such one-third to be those who have been longest in office, or when several have been in office for the same period, to be ascertained by ballot. The six representatives of colleges to serve for three years. Power to fill up occasional vacancies. Power to renominate and reelect. In the first place, the faculty and college members to be added to the existing Senate; but no new members to be appointed by the Crown or Convocation till the number of Crown and Convocation members respectively has fallen below six, and then only so as to bring the number up to six.

2. *Convocation* to remain unchanged[1]

3. *Constituent Colleges.*—The constituent colleges to consist of the following bodies in or near London: (*a*) Such bodies as may be named in a schedule to be settled by a joint committee of the Senate and Convocation. (*b*) Such other bodies being colleges or institutions incorporated by Royal Charter, or otherwise established on a permanent and efficient footing, in which the majority of the students are of the age of seventeen years at least, as the Senate, with the concurrence of the faculty or faculties interested, may from time to time admit. Admission as a constituent college shall be subject to such terms as may be agreed upon between the body becoming a constituent college and the joint committee or the Senate, with the concurrence aforesaid, as the case may be. The constituent colleges shall be arranged in three groups—viz., those colleges which are

principally intended to occupy the entire time of their students; those colleges in which lectures are given of the most advanced kind, whether professional, literary, or scientific; those colleges which are intended to aid the evening studies of persons engaged in business or otherwise do not fall under either of the preceding groups. By the terms of agreement on the admission of each constituent college the following points shall be determined:—(*a*) The group to which it shall belong; (*b*) the faculty or faculties to which it shall belong; (*c*) the number of members of the faculties to represent the college; (*d*) the class or classes of professors or teachers in the college who are to take part in the election of members to represent the college. In a college of the first and second group, the number of its representatives on the faculties shall *primâ facie* bear a larger proportion to the total number of professors and teachers in the college than in the case of a college in the third group. No person shall be eligible as a member of a faculty representing a college unless he be in the class of professors or teachers in that college and capable of taking part in the election of members to represent that college. Power to be given to the Senate with the concurrence of the faculty or faculties interested:—(*a*) To diminish or increase the number of teachers in a college who shall be members of a faculty or faculties; (*b*) for good cause to remove any college from being a constituent college. The affiliation of colleges to the university to cease. The institutions from which the university receives certificates for degrees in medicine (hereinafter called the recognised medical institutions) to retain their right of giving such certificates, whether they be or be not constituent colleges. The list of recognised medical institutions to be subject to the existing power of revision, but so that the Senate shall not report thereon without the previous advice of the faculty of medicine. (See Charter of Jan. 6th, 1863, section 37.)

4. *Faculties.*—There shall be four faculties—viz.: Arts, Laws, Science, Medicine. All departments of knowledge in which examinations may be held by the University, and not included in any of the other faculties, shall be included in the Faculty of Arts. Each faculty shall consist of—(*a*) Such of the teachers for the time being in that faculty in the constituent colleges as have been admitted to the faculty by the Joint Committee or the Senate (as the case may be); (*b*) the examiners in that faculty during their periods of office and three years afterwards; (*c*) such persons eminent in the studies with which the faculty is concerned not exceeding six in number as the faculty may elect, and for such periods as they may determine. Each faculty shall elect—a chairman for three years; three members of the Senate; a board of studies. The persons to be elected under the last clause must be members of the faculty not being examiners in office, and on ceasing to be members of the faculty or accepting the office of examiner such person will vacate their seats as chairman or member of the Senate or board. On any matter connected with its subjects a faculty may—(*a*) Make recommendations to its board of studies in all matters within the competence of the board; (*b*) represent its views to the Senate.

5. *Boards of Studies.*—There shall be a board of studies in each faculty. Each board shall consist of such a number of members, being a multiple of three and not less than six nor more than twenty-one, as the faculty shall from time to time determine, together with one member of Convocation to be elected by Convocation. One-third of the faculty members shall retire each year. The member elected by Convocation shall sit for three years. Power to fill up occasional vacancies. Power to re-elect. Each board shall elect a chairman every year. Each board of studies shall have the following powers and duties: (*a*) To consider the recommendations of its faculty; (*b*) to consult together on all matters connected with the subjects of its faculty and the examinations therein, and the teaching thereof; (*c*) to advise the Senate from time to time as to the institution of new degrees or any change in the degrees, or as to the regulations in force with regard to the degrees and examinations in its faculty (without which advice the Senate shall not act in the said several matters); (*d*) to consult with and advise the examiners in the faculty; (*e*) to represent its views on any matter connected with the subjects of its faculty to the Senate; (*f*) to make by way of report to its faculty such recommendations as it may think fit, with the object of ensuring suitable and efficient teaching in the subjects of its faculty, and generally to report to its faculty on all matters connected with its subjects, as the board may think desirable; (*g*) to summon a meeting of its faculty for the discussion of any matter relating to its subjects. Boards of studies may, if they or any of them shall from time to time think it desirable, meet and act concurrently on particular subjects.

6. *Examiners.*—The examiners in each faculty may from time to time make such reports and recommendations to the faculty or its board of studies as they may think fit.

7. *Degrees.*—Candidates to be admitted to matriculation and all degrees other than degrees in the medical faculty without regard to the place of their education. Candidates for degrees in the faculty of medicine to show that they have passed the required course of instruction in a constituent college in the medical faculty or in a recognised medical institution.

8. *General Provisions.*—Except so far as altered by the foregoing provisions, either directly or indirectly, the existing constitution of the University to be retained.

THE INTERNATIONAL INVENTIONS EXHIBITION.

WHEN compared with the Health Exhibition of last year, it must be acknowledged that, to medical men and sanitary reformers, the present exhibition does not afford the same scope for study. Yet it contains many objects of special and technical interest to our readers; but these are not grouped together. It is necessary to search them out. They are scattered irregularly over a wide space, and will be discovered in the most unexpected quarters. If we take the notable inventions since 1862, this would embrace by far the greater half of modern sanitary appliances; but such appliances were so well represented last year that only a small space is now devoted to the same subject. For instance, there is no special class assigned to the question of ventilation; nevertheless, suggestions in this respect will be found in the exhibits relating to mining, building, and railway rolling stock. In the latter department the Pignatelli system, No. 634 of the catalogue, is well worthy of notice. This is a cowl placed on the top of a railway carriage. As the opening faces the engine, the wind blows down into the apparatus with considerable violence when the train is in motion; it is therefore able to force its way through water about two inches deep placed in a trough, which forms a syphon; the air is thus completely washed and deprived of its dust; it is then allowed to descend into the carriages, where it is diffused by a cone-shaped inlet; this cleaned and fresh air finds its way out by the ordinary ventilators above the doors or windows. The pressure is sufficiently great to prevent these latter becoming inlets of air and dust. In hot climates, especially in the south of France, this contrivance has already rendered considerable service; and medical men who have accompanied invalids on long journeys will appreciate the advantages of better carriage ventilation.

In the electrical section aids to ventilation will also be found, though it is not exactly the place where the sanitarian would at first sight expect to meet fresh matter for this special branch of study. But, if we take the electro-motors exhibited by M. Immisch (No. 1335), it will at once be seen that they are destined to render great service both to the practitioner and to the sanitarian. Instead of the forty cells with oxide of mercury, with zinc that wears out, and batteries of irregular strength, it is proposed to substitute for hospital practice a small dynamo of 40, 60, or 100 volts, that is easily handled and will not get out of order. It may be worked by hand or with a treadle, and will give a perfectly constant and trustworthy electro-motive force if a uniform speed is maintained. For the purposes of ventilation the advantages of this new motor may be gathered from the fact that the manufacturers maintain it possesses an efficiency of 70 per cent., which is considerably higher than the usual yield of small motors. At the Paris Hôtel de Ville more than twenty electro-motors are employed to move the fans that supply air to the various apartments; and this motive force has been found especially convenient for ventilation where silence must be maintained and but little space exists for the introduction of elaborate machinery.

The same firm exhibits, but in the south central gallery (No. 2178), the metallic thermometer which won the first class and only award given for accuracy and portability at

the International Medical Congress of 1881. On that occasion the thermometer, which is so marked both in Centigrade and Fahrenheit that it can be used either for ordinary or for clinical purposes, was merely shown as a curiosity. Now it is proposed, for the first time, to introduce the invention to the trade. To medical men it offers several practical advantages. Circular in shape and resembling a small watch, it can be attached as an ornament to an ordinary watch chain; thus it need never be forgotten, and there is no fear of its breaking. As it measures only one inch in diameter, nothing can be more portable, and it may therefore be always carried upon the person. The construction is so ingenious that it merits a few words of description. A little tube is filled with a combination of extremely volatile liquids. One shoulder of this tube is made fast to the frame or case and then hermetically sealed. The end not affixed moves to the expansion of the spirits within; and a small spring attached to rack and pinion magnifies the motion of the tube. The action recalls in principle the Bourdon tube, and the chief difficulty lies in obtaining a perfect calibration. A needle indicates the action on a neatly engraved dial, and as the thermometer takes longer to fall than an ordinary instrument, there is less necessity of registration for clinical purposes.

About as far apart from each other as possible, even on the vast grounds occupied by the exhibition, we found two new systems of warming and ventilating that may render considerable service. The first, in the agricultural section, is shown by S. Deard (No. 97). It consists in converting the iron bars of the ordinary fireplace or open grate into hot-water pipes. These are made of wrought iron. The water warmed in the fireplace may then travel along a continuation of the pipes round the walls or to the windows or any other place where it is specially cold. With this contrivance, in a room 18 ft. by 18 ft. by 12 ft., the temperature was maintained at 85° F., during twenty-four hours, at a cost of one halfpenny per hour, coals being at 26s. per ton. This was done for the smoke abatement tests in January, when the outside temperature was 43° F. Such a method of utilising an ordinary fire for obtaining hot-water pipes that can be conducted all over the house, and used for a multiplicity of purposes, is as inexpensive as it is practical. At the other end of the building Brown and Green's new stove for churches and similar buildings (No. 1535) has already found considerable favour. The principal feature is an inlet of air above the fire, which not only helps to draw off the vitiated atmosphere of the room, but by coming in contact with bituminous smoke causes a flame to set in, and hence we have both economy and smoke abatement. To further maintain the health of habitations, the parquetry work of Brownlee and Co. (No. 216) may be recommended, particularly as by means of metal tongues small pieces three inches square can be kept strongly fastened together, though perforated in all directions for ventilating purposes. A curious dust inhaler, shown close by, would, if it works well, be of the utmost value in sweeping floors; but, unfortunately, the apparatus remains in an isolated condition all day, and there is no means of ascertaining how it is supposed to act. Next to it, Knight's patent deodorising ventilator for sewers is better explained, for there is a good model and some sectional drawings. Mr. Knight is surveyor for the Mile-end Old Town Vestry, and asserts that several of his ventilators have been in use for a year and a half, and have given excellent results. The system consists in making the sewer air pass through a framework where there are wet wicks that filter the gases. The lower portions of these wicks are immersed in a trough charged with a solution of chloride of zinc or some similar liquid. This reminds us of the old charcoal grates, only it is a moist instead of a dry purifying agent. But somehow sewer gas has the inconvenient knack of escaping everywhere except through the purifying preparation placed on purpose to receive it. We trust that Mr. Knight has been more successful, and that the sewer gas really does pass through his ventilator, instead of selecting the defects in the drainage of the neighbouring houses; but we have had no opportunity of testing his invention.

NORTH-EASTERN HOSPITAL FOR CHILDREN.—At the bazaar recently held at Cannon-street Hotel, and opened by the Princess of Wales, on behalf of this hospital, the sum of over £3000 was realised.

WILLS OF MEDICAL MEN.

THE will of Henry Thomas Lanchester, M.D., late of Croydon, who died on Jan. 8th last, was proved, on the 6th ult., by Mr. William Forster and Mr. William Tomlinson Page, junior, the executors, the value of the personal estate amounting to over £21,000. The testator leaves his household furniture and effects upon trust for his wife and children; an annuity of £300 to his wife, Mrs. Catherine Lanchester, and the residue of his real and personal estate to all his children in equal shares.

The will of Edward Wells, M.D., late of Reading, Berks, who died on April 13th last at Ventnor, was proved on the 22nd of May by Mrs. Charlotte Emma Wells, the widow and sole executrix, the value of the personal estate amounting to over £8000. The testator bequeaths to his wife £400; there are also some specific bequests to her; and the residue of his real and personal estate he leaves upon trust for her for life. At his wife's death, among other legacies, he bequeaths £4000 to his niece Mary Julia Wells, and £2000 to his niece Charlotte Anne Friend, and the ultimate residue is to be divided between his said two nieces in equal shares.

The will and two codicils of Thomas Renny Strachan Nivison, M.D., formerly of Somerford Grange, Christchurch, Hants, afterwards of 15, New King-street, Bath, but late of 161, Ledbury-road, Bayswater, who died on February 10th last, were proved on the 23rd of May by Mrs. Alice Maud Nivison, the widow, and Mr. William G. Crosbie, the executors, the value of the personal estate in the United Kingdom exceeding £7000. The testator bequeaths £1000 and his furniture and effects to his wife; £500 to his wife's brother, Miles Bradshaw; £100 to George Gordon Robertson; and some other legacies to be paid on the death of his mother. The residue of his real and personal estate is to be held upon trust for his wife for life and then for his children; and in default of children for his brother Richard.

The Irish probate granted at Londonderry of the will of William James Hamilton, M.D., late of Curryfee, county Londonderry, to the Rev. Joseph Corkey and Mr. John Holmes, two of the executors, was resealed in London on the 1st ult., the aggregate personal estate in England and Ireland exceeding £2200. The testator leaves all his real and personal estate upon trust for his wife and children.

The will of Mr. Joseph Denby Sainter, surgeon, of King Edward-street, Macclesfield, Cheshire, who died on April 25th last, was proved on the 9th of May at the Chester district registry by Mr. James Hooley and Mr. W. Thornycroft Hardern, the executors, the value of the personal estate exceeding £2800. The testator leaves £1860 upon trust to pay the income, free of legacy duty, to his housekeeper, Margaret Barrow, for life, and then to his son, James Dow Sainter, for life. On the death of the survivor of these, he bequeaths thereout £100 each to the Church of England Sunday School, Duke-street, Macclesfield; Christchurch Sunday School, Great King-street, Macclesfield; Trinity Church of England Sunday School, Hardsfield; St. Peter's Church of England Sunday School, Macclesfield, and the Macclesfield Church of England Sunday School, Roe-street; and the remainder of the said sum of £1860 to the Macclesfield General Infirmary. There are one or two other legacies, and the residue of his property he gives to his said son.

The following legacies have recently been left to hospitals and other medical institutions:—Mr. John Eden, of Beamish Park, Durham, £10,000 to the Durham Infirmary, £2000 to the Brompton Cancer Hospital, £500 to the Ryde Infirmary, and £200 each to the Gateshead Infirmary and the Ramsgate Dispensary.—Miss Mary Ann Blundell, 184, Alexandra-road, St. John's Wood, £100 to the British Home for Incurables, Clapham-rise.—Mr. Peter Atrell, 24, Tredegar-square, Mile-end, £500 each to the London Hospital, Whitechapel, the City of London Hospital for Diseases of the Chest, Victoria Park, and the East London Hospital at Shadwell for Children; £300 to St. Mark's Hospital for Fistula, City-road; £250 to the Poplar Hospital, East India-road, Poplar; and £200 to the Royal Hospital for Incurables, West Hill, Putney.—Mr. Frank John Moore, of Woodcock Hill, Northchurch, Herts, £500 to invest for the purposes of the West Herts Infirmary.—The Rev. George Currey, D.D., Master of the Charterhouse, £100 to the East London Hospital for

Children.—Mr. James Alexander, of Avening House, Hampstead, £1000 each to the Royal Hospital for Incurables, Putney, and the London Homœopathic Hospital.

THE HOSPITAL SUNDAY FUND.

THE following are the principal contributions which have been received on behalf of the Metropolitan Hospital Sunday Fund since the publication of our last issue:—

St. Mary Abbots Parish Church, Kensington, £298 18*s.* 2*d.*; Christ Church, Kensington, £115 16*s.* 10*d.*; "D. C." (a further donation), £100; Christ Church, Lancaster-gate, £519 8*s.* 10*d.*; Brompton Church, £332 9*s.* 6*d.*; Camden Church and School, Camberwell, £114 8*s.* 4*d.*; Corporation of the City of London, £105; St. Matthew's, Bayswater, £200 6*s.* 7*d.*; Quebec Chapel, Marylebone (with additions), £266 7*s.* 3*d.*; Grosvenor Church, South Audley-street, £107 8*s.* 8*d.*; St. Stephen's, South Kensington, £179 14*s.*; St. Mary's, Bryanston-square, £118 12*s.* 6*d.*; St. Mark's, North Audley-street, £220 5*s.* 2*d.*; St. John's, Paddington, £177 5*s.* The total amount received on behalf of the fund up to the time of our going to press is £29,500.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Sherborne Rural District.—Mr. Davies, in his very brief report for last year, states that overcrowding exists to a large extent in the villages of Yetminster, Bradford Abbas, and Nethercompton. Diphtheria occurred in Lenthay, near Sherborne, which, it is stated, was distinctly traceable to contamination of the drinking water with sewage; attention is forcibly directed to the condition of the lake in Sherborne-park and the water running into it, which is contaminated by the sewage of Milborne Port. This is said to be absolutely dangerous to the health of Sherborne and the neighbourhood. The death-rate for the year was 14·9 per 1000.

Wem Rural District.—The death-rate in the whole union is 18·64 per 1000, that of the township of Wem, excluding the workhouse, is 21·11 per 1000; these rates are higher than at any previous time during the last ten years, and the infant mortality has been specially large. Of the total number of births, 7·3 per cent. were illegitimate, the result, Dr. Giles says, of defective bedroom accommodation in cottages, leading to overcrowding of the most demoralising nature. He also refers to the facility with which illegitimate children are placed out to nurse by their mothers, and to their neglect under these circumstances. The town of Wem is now supplied with water ample in quantity and of good quality from a well situated in the new red sandstone. The work of substituting movable box closets for privies with cesspools has so far progressed that nearly half the houses in the town are thus provided; the periodical emptying of such closets is performed by the authority, but the emptying of the ashpits is in future to be undertaken by individual householders. Dr. Giles says this latter duty "is very properly considered to fall upon the householder." It must be obvious, however, that efficiency is likely to be sacrificed by such a step. He lays stress upon the need for notification of infectious disease, and thinks this duty should devolve upon the householder; he believes that a severe epidemic of measles which prevailed during the latter part of the year might have been averted had it been possible to isolate the first cases.

Borough of Batley.—In this borough the death-rate for last year was 21·25 per 1000, and the zymotic death-rate reached as high a figure as 5·62 per 1000. As many as 40 persons died from scarlet fever, some of the cases being ascribed to an infected milk-supply. In one farm it was found that the milk vessels were washed and dried in a room in which two children suffered from scarlet fever; 14 deaths occurred from diphtheria, one of them in a house in a most insanitary condition, and which had been under the notice of the sanitary authority for over twelve months without any steps being taken to put the house in order. Diarrhœa caused 54 deaths; and here again we find this very high mortality attributed to conditions which it is the business of the sanitary authority to remedy. Reporting on the cases of enteric fever, Dr. Swann says that certain buildings in which cases occurred were in a most insanitary condition, the block consisting principally of back-to-back houses and cellar dwellings, a loose brick drain communicating with the sewer running under them. The cellar dwellings were built since the Public Health Act of 1875. Dr. Swann observes, with some reason, "that he is at a loss to imagine how a General Works Committee could sanction plans with such a vile drainage system." This report throws a great responsibility on the local authority, for they cannot, in face of the statements made in it, plead ignorance of the very serious conditions they are called upon to remedy. It is satisfactory at the same time to observe that steps are being taken to disconnect houses from direct communication with the sewers, and it is to be hoped that inasmuch as attention has been drawn to the need for an improved water-supply, this important matter will not be lost sight of.

Gloucester (Urban).—The chief points in Mr. Wilton's report for the year 1884 are the need for providing a water-supply to waterclosets in many houses and for improved hospital accommodation for infectious diseases. With regard to the first subject, it is shown in the report that nearly 3000 houses have no flushing boxes to the waterclosets, and it is very properly pointed out that unless ample means are provided for the carrying off of excremental matter from house drains, the city would be exposed to considerable risk in the event of the invasion of cholera. It is satisfactory to learn that the sanitary authority is making preparations for the prevention of the spread of this disease by carrying out rapidly the sewerage works in the south end of the district and the connexion of house drains with the city system of sewers. Concerning the hospital for infectious diseases, it is obvious that improvements are much needed, for we learn that it is impossible to treat with safety two kinds of infectious disease at the same time, and that there are no means of isolating patients recovering from one kind of disease from those suffering from another. Other serious defects also exist; the ventilation of the wards is stated to be most imperfect, the wards being placed back-to-back with a wall between them so that through ventilation is impossible. The absence of "observation" wards is certainly a great want; at the present time a doubtful case has to be placed in a ward which is very likely to be occupied at the same time by infectious cases. Dr. Blaxall has recently visited the town and port and has recommended the improvements indicated in Mr. Wilton's report. The subject of hospital provision for cholera is also considered, and it is pointed out that temporary accommodation may best be made in the vicinity of the docks either at Sharpness or at Gloucester. The death-rate for the year was 17·2 per 1000, deaths from zymotic diseases being, with the exception of measles, less than in the previous year.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5331 births and 3011 deaths were registered during the week ending the 27th ult. The annual death-rate in these towns, which had declined in the preceding eleven weeks from 25·0 to 18·3, further fell last week to 17·6, a lower rate than has prevailed in these towns in any week of recent years. During the first twelve weeks of the second quarter of this year the death-rate in these towns averaged 20·9 per 1000, against 21·9, the mean rate in the corresponding periods of the nine years 1876-84. The lowest rates in these towns last week were 11·1 in Derby, 12·0 in Bristol, 12·6 in Nottingham, and 12·9 in Hull. The rates in the other towns ranged upwards to 21·5 in Cardiff, 22·3 in Halifax, 28·6 in Newcastle-upon-Tyne, and 30·6 in Manchester. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 430 and 455 in the preceding two weeks, were 448 last week. These deaths included 157 from measles, 106 from whooping-cough, 70 from diarrhœa, 36 from scarlet fever, 32 from "fever" (principally enteric), 28 from diphtheria, and 19 from small-pox. No death from any of these zymotic diseases was registered last week either in Brighton or in Derby; while they caused the highest death-rates in Birkenhead, Newcastle-upon-Tyne, and Manchester. The greatest

mortality from measles occurred last week in Birkenhead, Newcastle-upon-Tyne, and Manchester; whooping-cough in Birkenhead, Plymouth, and Blackburn; scarlet fever in Sunderland, and "fever" in Norwich. The 28 deaths from diphtheria in the twenty-eight towns included 14 in London, 4 in Portsmouth, 2 in Liverpool, and 2 in Leeds. Small-pox caused 44 deaths in London and its outer ring of suburban districts (exclusive of 15 deaths of London residents recorded in the metropolitan asylum hospitals and camp at Darenth), 3 in Liverpool, 1 in Manchester, 1 in Sheffield, and 1 in Sunderland. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had declined from 1389 to 1119 in the preceding three weeks, had further fallen to 1000 on Saturday last; the admissions, which had declined in the previous four weeks from 272 to 163, further fell to 134 last week. The Highgate Small-pox Hospital contained 65 patients on Saturday last, 15 cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had declined in the preceding five weeks from 305 to 196, further declined last week to 183, which were 42 below the corrected weekly average. The causes of 59, or 2·0 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Brighton, Oldham, Bradford, and in eight smaller towns. The largest proportions of uncertified deaths were registered in Birkenhead, Halifax, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 20·6 and 20·8 per 1000 in the preceding two weeks, further declined to 20·4 in the week ending June 27th, but exceeded by 2·8 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 15·0 and 15·4 in Perth and Edinburgh, to 24·3 in Glasgow and 28·1 in Paisley. The 497 deaths in the eight towns included 14 which were referred to whooping-cough, 13 to measles, 8 to scarlet fever, 6 to diarrhœa, 4 to diphtheria, 3 to "fever" (typhus, enteric, or simple), and not one to small-pox; in all only 48 deaths resulted from these principal zymotic diseases, against 63 and 64 in the preceding two weeks. These 48 deaths were equal to an annual rate of 2·0 per 1000, which was 0·6 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had declined in the nine preceding weeks from 30 to 16, further fell to 14 last week, of which 10 occurred in Glasgow. The 13 deaths from measles showed a decline of 4 from the number in the previous week, and also included 10 in Glasgow. The 8 fatal cases of scarlet fever, on the other hand, showed an increase upon the numbers in the previous two weeks; 7 occurred in Glasgow. The 6 deaths attributed to diarrhœa, of which 4 were returned in Dundee, were but half the number in the previous week. The 4 deaths referred to diphtheria, and the 3 to "fever," were considerably below the average numbers in recent weeks. The deaths from acute diseases of the respiratory organs in the eight towns, which had been 94 in each of the previous two weeks, declined to 74 last week, and corresponded with the number returned in the corresponding week of last year. The causes of 71, or nearly 15 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 29·1 and 27·5 per 1000 in the preceding two weeks, was again 27·5 in the week ending the 27th ult. During the first twelve weeks of the second quarter of the year the death-rate in the city averaged 30·1 per 1000, the rate during the same period not exceeding 19·5 in London and 18·3 in Edinburgh. The 186 deaths in Dublin last week corresponded with the number in the previous week, and included 12 which were referred to "fever" (typhus, enteric, or simple), 7 to measles, 5 to whooping-cough, 4 to scarlet fever, 2 to diarrhœa, 1 to small-pox, and not one to diphtheria. Thus 31 deaths resulted from the principal zymotic diseases, against 15, 24, and 20 in the preceding three weeks; these 31 deaths were equal to an annual rate of 4·6 per 1000, the rate from the same diseases last week being 3·0 in London and 1·0 in Edinburgh. The 12 deaths referred to "fever" in Dublin showed a considerable increase upon recent weekly numbers, and exceeded the number in any previous week of this year. The fatal cases of measles and of whooping-cough also exceeded the numbers returned in the previous week. The death from small-pox was the second recorded in the city since the beginning of this year. Six inquest cases and 7 deaths from violence were registered, and 50 deaths were recorded in public institutions. The deaths of infants and of elderly persons showed an increase upon the number in the previous week. The causes of 30, or more than 16 per cent., of the deaths registered during the week were not certified.

BARCELONA.

Barcelona, according to Dr. P. Garcia Faria, in the *Revista de Ciencias Medicas de Barcelona*, though less unhealthy than formerly, is still in need of more sanitary reform. It is well situated, and, if properly drained and carefully governed, there is no reason why it should not be a most healthy city. From 1836 to 1847 the annual deaths exceeded the births by 86; from 1856 to 1865 by 189; from 1866 to 1880 there was an average annual excess of 595 deaths over the births, while at the present time the birth-rate exceeds the death-rate by 11 per 1000.

THE SERVICES.

SURGEONS R. Haselden and W. C. D. Braddell have arrived at Cairo from the Nile, sick; Surgeon H. H. Johnston left Cairo on the 24th ult., invalided to England, in the *Argo*.

ADMIRALTY.—The following appointment has been made:—Mr. C. J. Workman, to be Surgeon and Agent at Teignmouth and Shaldon.

ARTILLERY VOLUNTEERS.—1st Ayrshire and Galloway: Acting Surgeon Alexander Valentine resigns his appointment.—1st Shropshire and Staffordshire: John Payne Massingham, Gent., to be Acting Surgeon.

RIFLE VOLUNTEERS.—3rd (the Buchan) Volunteer Battalion, the Gordon Highlanders: Alexander Gray Duguid, Gent., M.B., to be Acting Surgeon.—1st Edinburgh (the Queen's City of Edinburgh Rifle Volunteer Brigade): Surgeon Alexander Gordon Miller is granted the honorary rank of Surgeon-Major.—1st Oxfordshire (Oxford University): William Lewis Morgan, Gent., to be Acting Surgeon.

Correspondence.

"Audi alteram partem."

TREATMENT OF CHOLERA: A SUGGESTION.

To the Editor of THE LANCET.

SIR,—Perhaps the chief pathognomonic symptom of cholera Asiatica is the thickening of the blood, owing to the excessive loss of its aqueous parts, evidenced by its effects on the various organs of the body. All your readers are aware of the intimate connexion between the skin and the intestinal tract, and treatment directed to the former for the relief of the latter has long been essayed.

Niemeyer, in his "Text-book of Practical Medicine," revised edition, translated by Humphreys and Hackley (H. K. Lewis, 1874) says, with reference to the disease in question: "The symptomatic treatment, which in the first epidemics consisted in attempts to elevate the fallen temperature by vapour baths, and by having the patient drink hot teas during the algide stage, but not allowing them a drop of cold water, and in attempting to draw blood from all cases of cholera asphyxia, was certainly incorrect. Depression of the temperature of the body is a late occurrence in the series of symptoms induced by the cholera infection; warm tea, which is more readily vomited than any other drink, is not nearly so well borne as small quantities of cold water; venesection cannot raise the depressed action of the heart, on which the venous congestion depends. The symptomatic treatment of cholera requires, first of all, attention to the intestinal disease, the arrest of the acute catarrh and acute transudation of serum from the intestinal capillaries, the

source of all the other symptoms and of the danger. The second symptomatic indication is, to replace the water lost from the blood. If we succeeded in making a cholera patient sweat while the transudation into the intestines continued, we should injure him by the increased abstraction of water. Lastly, the third indication, which we must bear in mind from the first, is to combat the threatening paralysis of the heart." After speaking of the value of opium, he proceeds: "If, on the other hand, in spite of the repeated doses of opium, the diarrhœa continues and goes worse, if the patient collapses visibly, if his skin grows cool and the dejections lose their colour, I regard the continuation of opium as contraindicated; while, in such cases, I have had the best results from cold compresses frequently applied to the abdomen, and from the administration of calomel (a grain every hour). In regard to the speedy, favourable effect of this treatment, especially of the application of cold compresses to the abdomen, on most patients, in regard to its favourable influence on the entire disease, and the principles which induced me to employ it, I refer to my *brochure*, 'Die Symptomatische Behandlung der Cholera' (Magdeburg, 1848), and would only mention that, in 1854, when Pfeuffer was commissioned to instruct the Bavarian physicians in the treatment of cholera, he recommended my method as being the most successful, according to his experience. . . . The second indication, to replace the loss of water from the blood by supplying water, is best attained by giving the patient small portions of ice-water, or small pieces of ice to swallow at short intervals."

My attention had not been specially drawn to the above remarks of Professor Niemeyer, nor was I aware of his views, when it occurred to me that we possess in the application of cold—as in the refrigerating chamber—a very powerful therapeutical agent, the operation of which appears to be well deserving of extended trial in the treatment of cholera. "External cold diminishes and heat increases the metabolic activity of the cold-blooded animals; but in warm-blooded animals, within certain limits, cold increases and heat diminishes the bodily metabolism, as shown by the increased or diminished consumption of oxygen and production of carbonic acid as the temperature falls or rises." (Professor Latham on the Action of Salicylic Acid in Rheumatism, THE LANCET, June 27th, 1885.) We can readily conceive the powerful effect on the system of the application of external cold through the medium of the vaso-motor and general nervous systems. Of this, too, we are certain: that heat, an elevated general temperature of the atmosphere, is a powerful factor of an adverse nature in cholera and many other diseases, especially when it is combined with miasma; and we know that cholera epidemics usually decrease in virulence with a decided fall in the temperature, and disappear in cold weather or in polar latitudes. May we not, then, reasonably infer that in the application of cold we have a powerful agent, whose assistance has indeed already been beneficially sought and obtained to a greater or less extent in the treatment of cholera, and which invites our further inquiry and attention?

In the practical application of this therapeutic agent, should its further trial warrant its extended use in general practice, and especially so as to meet the emergencies of a cholera epidemic should it unfortunately occur, some difficulty may be experienced. Already, however, the practical application of science in the processes of refrigeration for the preservation and transportation of our animal food supplies from abroad—"dead meat"—and the various known and applied processes for the manufacture of ice, may permit of the construction of refrigerating chambers, in suitable places, for the immediate reception and treatment of cases of cholera; whilst the adaptation of the same to portable apparatus, for use in rural districts, would very probably follow as a matter of course.

The immediate difficulty appears to be in the testing of the suggestion for treatment herewith broached; but where the supply of ice is plentiful, as we may presume it is in our large towns, and as it certainly is in American large cities and elsewhere, some modification of the refrigerating chamber may be extemporised, and, when occasion but too sadly requires, the fuller influence of the general rather than the topical application of a therapeutic agent of great power may be practically put to the test.

I am, Sir, yours faithfully,

JOHN WARD, M.D.

Sutton Coldfield, Birmingham, June 29th, 1885.

THE OCCURRENCE OF JAUNDICE AS A SYMPTOM OF GALL-STONE.

To the Editor of THE LANCET.

SIR,—The extremely interesting and valuable lecture of my old master, Professor Gairdner, adds another to the already numerous pieces of evidence which have been persuading me for some time to the belief that we shall have to reconsider a good deal of what is ordinarily taught concerning both the physiology and pathology of the liver. At its conclusion, he says:—"These citations will serve to show that the case now brought before you is not, perhaps, altogether unexampled, although I confess that I had never before either seen or heard of one in which such a succession of attacks, extending over so long a time and involving in all probability the passage of quite a multitude of gall-stones, had occurred without either yellowness of the skin or the conjunctivæ, or detection of bile pigment in excess in the urine." I have more than once drawn attention to the fact that in the history of the cases where I have been called upon to perform cholecystotomy for the relief of suffering due to the impaction or repeated passage of gall-stones, the occurrence of jaundice has been conspicuous by its absence as a symptom. In fact, it has been only present markedly in one case where I have operated, and in that case my belief that there was a gall-stone was never confirmed, and in all probability the obstruction was due to cancer. In none of the cases where I have removed gall-stones (fifteen in number) has there been any history of jaundice. I have only this morning had sent to me by Dr. Aust Lawrence of Bristol a very typical instance, in which a woman only thirty-six years of age has suffered for six years from almost unceasing agony by the passage of numerous gall-stones. She has recovered from the fæces no less than thirty-six stones, and probably a very much larger number have passed; yet there has been an absolute absence of jaundice save in the first attack, and then the discolouration lasted nearly a fortnight. I have the stone which was passed at that time, and it is by no means a large one, weighing only 2·32 grains, whilst others which have been passed since have been very much larger.

I have been seeking for an explanation of this curious discrepancy between my own experience and what has been believed and asserted concerning the passage of gall-stones, and have not yet come across anything which seems to me satisfactory. I am precluded, by the abundance of my engagements and my reticence in making anything like post-mortem investigations, from making an exhaustive inquiry into what, it seems to me, very much needs a re-investigation—the minute anatomy of the bile-ducts. From the casual examination of three or four specimens, I am inclined to believe that an explanation is to be found in the different diameters and constructions of the cystic duct and the common duct. In the ordinary text-books the latter is described as being as large as a goosequill and about three inches long, whilst the former is said to be smaller and only about one inch in length. The few examinations that I have made lead me to believe that the cystic duct is longer than is said in the text-books, and the common duct is a good deal shorter. Also, I believe that the common duct is much less rigid and more easily dilated than the duct from the gall-bladder. If these relations actually hold good, we can easily understand how the passage of even a small gall-stone through the cystic duct will give rise to intolerable agony, whilst during that stage of its passing it would not give rise to the slightest appearance of jaundice. It would have behind it for its protrusion only the contraction of the bladder; but the moment it entered the common duct the extruding impulse would be increased by the influence of the whole excreting force of the liver, in addition to the contractile power of the gall-bladder; and we can easily imagine that therefore the passage of the stone through the common duct would be considerably quicker than its passage through the cystic duct. The amount of fluid which has to pass through the common duct must be very much larger than that which passes through the cystic duct, and the amount of flow which the former has to accommodate in all probability varies exceedingly from time to time. Concerning the cystic duct, on the other hand, there appears to be no need for any margin of variation, and it is not difficult to imagine that the actual diameter of the common duct and the

degree to which it can be distended must be very much greater than those qualities in the cystic duct. If these features be found upon extended observation really to exist in the two ducts, a ready explanation will be found in them of what is actually the fact in my own experience, that the occurrence of jaundice either in the skin or in the urine during and after the passage of gall-stones is of extreme rarity, and not, as has been believed, common. The chief symptom, that of pain, would be explained by the slow passage of the gall-stone through the comparatively rigid canal of the cystic duct, whilst its rapid passage through the easily distended and much larger common duct would not give time, in the majority of instances, for the occurrence of jaundice, which could of course only be produced after the obstruction of the flow of bile through the common duct for some considerable time.

In the case which I have just quoted, sent to me by Dr. Aust Lawrence, the facts that the majority of the gall-stones were of pretty uniform size, and that only in connexion with the passage of the first did jaundice occur, seem to me confirmatory of my views. We may take it, perhaps, that the passage of the first stone, by dilating the common duct, rendered the passage of its successors so easy that no jaundice was produced. The first dilatation of the cystic duct has, on the contrary, had no such effect, for her suffering whilst the last stone was passing a few days ago was quite as intolerable as on previous occasions.

I am, Sir, yours, &c.,

Birmingham, June 8th, 1885. LAWSON TAIT.

ETHER AS AN ANÆSTHETIC.

To the Editor of THE LANCET.

SIR,—At the present moment, when the question of Chloroform *v.* Ether is again occupying a prominent position, the following case may prove of interest, as tending to show that the dictum that ether never kills by stopping the heart is one not entirely to be relied on.

I was called upon to administer an anæsthetic to a middle-aged, fairly healthy female patient, who was to undergo an amputation. I elected to use ether by Clover's method; as a matter of routine I examined the heart, which was apparently normal as regards valves and muscular tone. The patient inhaled the anæsthetic readily, and without the slightest struggle. The operation lasted about three-quarters of an hour, and six ounces of ether, which I have reason to believe was of excellent quality, were used. Towards the end of the operation there was a slight tendency to vomit saliva. Following one of these attempts, four or five minutes after the anæsthetic had been laid aside, and, in point of fact, when the dressings were being put on, I noticed that the breathing was becoming shallow, that the radial pulse, which throughout the operation had been small, had become imperceptible, and that the patient was rapidly assuming an ashen livid hue. An endeavour was made for a moment to excite the heart and lungs by artificial respiration; this had no effect, and matters were assuming a very serious aspect, fæcal evacuations being passed involuntarily. Having some of Allen and Hanburys' nitrite of amyl capsules in my anæsthetic case, I broke one on a pocket-handkerchief and applied it to the mouth and nostrils; after two or three inspirations, shallow as they were, there was a very marked change for the better, and after the lapse of a minute the pulse returned and the patient was practically out of danger.

I venture to look upon this case as an instance of temporary heart failure, differing as it did so markedly from the usual symptoms of spasm of the glottis with which one is so familiar during ether administration. It may, perhaps, be questioned whether the ether was to blame for the accident, or whether the shock of the operation had caused the syncope; judging by the trifling loss of blood and other considerations, I am inclined to consider that this was not the case, but that the effort of vomiting, aided perhaps by the possible passage of acrid fluids from the stomach into the larynx, hindered free respiration for a moment, and caused the already embarrassed heart to hesitate, if not to stop altogether.

The behaviour of the nitrite of amyl under the trying circumstances was in the highest degree satisfactory. Even if breathing should cease in cases similar to this, there seems to be no reason why the drug should not be administered by means of artificial respiration. In future it will be a source of great comfort to me, in giving chloroform or ether, to have at hand, in case of accident, so potent an ally.

I remain, Sir, yours truly,

BERTRAM THORNTON, M.R.C.S., L.R.C.P.

Cecil-square, Margate, June, 1885.

METHOD OF DEMONSTRATING THE PRESENCE OF PNEUMOTHORAX.

To the Editor of THE LANCET.

SIR,—The presence of a pneumothorax is usually demonstrated on the post-mortem table by the sound of the escaping gas on opening the pleural cavity, or by the flaring or extinction of a lighted match held over the opening, or else by the bubbling up of the escaping gas conducted beneath water. The latter method is probably the most satisfactory, all things considered, and certainly so if there be a class to demonstrate to. Better still probably is the following method. A length of ordinary glass tubing is bent into manometer shape; on to the short arm of the manometer a piece of rubber tubing is fitted; the other end of the tubing fits on to a hollow sharp-pointed aspirating needle; some water poured into the bend of the manometer completes the apparatus. If the chest of a pneumothorax be now stabbed with the needle, the rise of the water in the long arm of the manometer at once demonstrates the presence of gas in the pleural cavity, and the difference of level of the fluid in the two arms of the manometer measures the intro-thoracic tension of this gas. The needle may be withdrawn and the same or successive intercostal spaces punctured in turn, each time with a repetition of the demonstration. In puncturing the left side low down the needle may penetrate the diaphragm and enter the stomach; in such case the manometer will record a *plus* pressure, as in the case of a pneumothorax; this must be remembered and guarded against. The advantages of this method are: the readiness with which the apparatus is fixed up and applied, and its fitness for demonstration at a distance; further, that it affords a means of measuring the intro-thoracic pressure.

Clearly the method, if necessary and to the advantage of the patient, is applicable during life; but, however applied, its simplicity is such that it can scarcely be novel, and I must apologise to all those who are in the habit of demonstrating the subject after this fashion. That it cannot be quite common property I judge from the fact that the method is not mentioned in Virchow's "Post-mortem Examinations" or in Orth's "Compendium der Diagnostik," both of them practical books; nor have I found it elsewhere.

I am, Sir, yours faithfully,

H. SAINSBURY, M.D., M.R.C.P.,

June 23th, 1885. Assistant Physician to the Royal Free Hospital.

IMMUNITY FROM INFECTIOUS DISEASES.

To the Editor of THE LANCET.

SIR,—In your issues of April 11th and 18th appeared an article by Dr. George M. Sternberg on the possible explanations of acquired immunity from infectious diseases. There is another explanation besides the three mentioned by the writer—namely, the theory that after an attack of the infectious disease the tissues through which the poison can be supposed to permeate in order to reach the blood (lung or alimentary canal) become impervious to the particular germ, so that the germ is unable to re-enter the blood. This explanation is quite distinct from the theory of "vital resistance," which is the destruction of the poison in the blood by virtue of the vitality of the leucocytes in the hæmic or lymphatic systems. According to the "impermeability theory," a second attack would be due to some local disease removing the impermeability of the tissues conferred by the first attack.

Dr. Sternberg has not given the "exhaustion theory" the consideration it deserves. It is not necessary for the germ pabulum to be entirely removed at the termination of the disease. All that is required by the theory is the belief that the germs have an amount of pabulum in the blood which is not sufficient to allow of the propagation of a large number of germs. We know from the existence of a period of incubation that until the germs have reached a certain number

no effect is produced on the system. The absolute immunity against certain infectious diseases which some animals have is probably due to the absence of the germ pabulum. The vaccine germ lives upon the very same pabulum as the small-pox germ; hence the immunity from small-pox conferred by vaccination. The immunity from yellow fever which the negro enjoys may be due to the consumption by the malarial germs of the yellow fever germ pabulum. The resistance of some individuals to an infectious disease can be accounted for by the absence (or presence in small quantity) of the germ pabulum, owing to some idiosyncrasy. The tolerance of drugs does not support the "vital resistance theory," because such tolerance is produced after prolonged action of the chemical substance. The "exhaustion theory" does not prevent the opinion that diminished vitality is a predisposing cause, permitting the entrance of the germs within the system.

Dr. Sternberg inquires why no new production of the germ pabulum occurs after an attack of one of the diseases in question. Now, there is every reason to believe that the germ pabulum is slowly reproduced, and sufficient may accumulate in the blood to result in a second attack after some years on a future exposure to the poison. That the germ pabulum should be actively produced only during fœtal and early life is easily accounted for. If anyone regrets that the germ pabulum should exist for evil, he must extend his regret to the vermiform appendix, which exists only to produce peri-cæcal abscesses, &c. That the vital resistance should be unable to prevent an attack is a circumstance demanding as much pity as the former case. To increase the vital resistance after the attack is over is like the shutting of the stable door after the horse has got out. It is not an improvement to introduce several vital resistances for the different germs in place of a different germ pabulum for each parasite. The "exhaustion theory" is superior to the "vital resistance" theory in giving a material basis for explanation, and accounting for resolution by lysis or crisis after a definite period.

I am, Sir, yours truly,

HENRY M'CAUL ALSTON,

May 18th, 1885. Member of the Medical Board, Trinidad, W.I.

PERITONEAL ABSCESS FOLLOWING ENTERIC FEVER.

To the Editor of THE LANCET.

SIR,—In the interests of scientific accuracy, I shall be glad to be permitted to make some remarks on the second case brought forward at the West London Medico-Chirurgical Society by Dr. Thorowgood on March 6th, reported in your issue of May 30th, p. 992, as an instance of peritoneal abscess following enteric fever.

This patient came under my charge in the house of her mistress on October 1st, 1884, fourteen days before her admission to the West London Hospital. She was already gravely ill, requiring two visits from me on the 3rd; and the history of her case gave me a clear diagnosis, not pointing to that of typhoid. Her family history showed a tendency to strumous glandular disease. She had already suffered from suppurating glandular disease in the neck. Two sisters were phthisical, and her father had had his foot amputated for strumous disease of the tarsal bones. The immediate cause of the present illness was definite. Having lived for eight weeks as servants live on board wages she had gone on the night of Sept. 27th to meet her mistress, who was to arrive at King's-cross Station by the Scotch train. The train was late, and the patient had an hour to wait. She detailed to me the cold and misery she endured in this draughty station in terms which left no doubt on my mind that she was justified in attributing the symptoms she now suffered from as due to the effects of being thoroughly chilled at the station. The impression I gained from her condition was that of a person whose whole system had received a check from exposure to cold. The seats of pain, apparently referable to inflammatory action, were at the early period of the case most decidedly over the left iliac fossa, and not over the right, then over the womb, and later in the progress of the case in the region of the diaphragm, causing a peculiar catching in the respiration. There was some tough scanty pneumonic expectoration The temperature did not behave as in typhoid, and the stools were not at this stage of a typhoid character.

On sending the case into hospital, I wrote a note giving somewhat the above history. I was therefore surprised to find that two typhoid spots were reported three days after admission, and at once went to examine them. I found close up on the right side, under the line of the diaphragmatic attachment in front, two minute ink marks, the spots having by some inadvertence been inked over, rather than inked round. I again called at the hospital more than once to inquire if the spots had been succeeded by others, but none appeared. Soon, however, I was given the history of the sudden accession of troublesome cough followed by copious expectoration of pus mixed with blood, and it was on this occasion that I ventured to suggest its origin as suppuration of mediastinal glands, but of course only as an outsider, without further investigation of the case, my suggestion being hazarded chiefly from my knowledge of the family history. (The nucleus of the abscess would in all probability be broken-down lumbar gland tissue.) The post-mortem examination shows this pus to have "formed in a sac quite apart and shut off from the intestines on the right side."

The question therefore arises, On what ground can this be considered to have ever been a case of enteric fever? My friend, Dr. Travers, who had not previously heard of the circumstances, seems to have been struck with the diagnosis so far as it was based on the strength of "one" spot, and certainly one or two spots do not make typhoid. Supposing them to have had special relation to the disease at all, it seems more reasonable to inquire whether spots may not be expected to accompany suppurative disease in the abdomen, independent of lesion of Peyer's patches.

I am, Sir, yours faithfully,

Kensington, June 10th, 1885. DAVID R. PEARSON, M.D.

THE STATE OF THE PULSE IN CHEYNE-STOKES' RESPIRATION.

To the Editor of THE LANCET.

SIR,—At p. 1183 of THE LANCET of June 27th the question is raised whether other observers had noted an *alternation* in rhythm on the part of the respiration and heart in Cheyne-Stokes' respiration. This *has* been observed, though possibly not in so extreme a degree as in the case reported from St. George's Hospital. The following passage is quoted *verbatim* from a long article I published on Cheyne-Stokes' respiration in the *British Medical Journal*, Aug. 31st, 1878, p. 308.

"A slowness of the pulse during the period of respiration and dyspnœa, and an acceleration of it during the period of apnœa, was first recorded by Dr. Seaton Reid in 1859-60. His statement was confirmed in two of the cases published by Dr. James Little, and in the one by Dr. Benson. Recently Biot joins himself to these observers, and cites Bernheim in support of that view. For example: in one case Little found fifteen cardiac pulsations during an apnœal period of ten seconds, and only six beats during ten seconds of the dyspnœal period; and in another case were nineteen pulsations during an apnœal period of ten seconds, and only ten pulsations during a portion of the dyspnœa of similar duration. In Biot's case, at different periods, were apnœa of eighteen seconds with thirty-six pulse-beats, and dyspnœa of forty-nine seconds with only eighty-two pulsations (would be ninety-eight if at the same rate as during apnœa); again, in fifteen seconds of an apnœal period were twenty-eight beats, and in fifteen seconds of the dyspnœal period only twenty-four beats; again, during apnœa of eighteen seconds' duration were thirty-five beats, and during dyspnœa of fifty-five seconds' duration only ninety-three beats (would be 107, if at the same rate); and again, during apnœa of thirty seconds' duration there were fifty-five beats, and during thirty seconds of the dyspnœa there were only forty-seven beats. In opposition to this experience is that of Hayden. He distinctly states that he has not met with the *alternate* rhythmic ascent (and descent) of the pulse and respirations during the cycle, but, on the contrary, has observed 'either an absolute uniformity of the pulse throughout the attack, or, as in one or two cases, a slight acceleration during the period of dyspnœa, and a gradual decline in that of descent till a minimum rate was reached on the accession of apnœa.' Laycock's report is confused with reference to this point. In my own Case 1, the slowing of the pulse during the period of dyspnœa, or its accelera-

tion during that of apnœa, was noticed on some days or at some hours on a given day; but at other times careful and repeated examination often failed to detect any change in its rate. Indeed, I now find that this was noticed to some degree by the first observer, Dr. Reid, for, in speaking of this peculiarity of the pulse, he says that 'neither it nor the distress is to be found equally marked or intense on every day.'"

With reference, however, to the relation of arterial tension to the different parts of the cycle, the case, as reported by Mr. H. R. Davies, differs from the experience of Traube and Biot.

I am, Sir, yours faithfully,

Grove Hall Asylum, London, June 27th, 1885. W. JULIUS MICKLE.

"THE TRAFFIC IN GIRLS."

To the Editor of THE LANCET.

SIR,—With your remarks in THE LANCET of June 27th, as to the absurdity of the statement attributed to Mr. James B. Wookey, I entirely agree; and such statements can do nothing but injury to a good object, in which everyone must sympathise. For three years it has been my duty to attend every morning at St. Bartholomew's Hospital, and, in conjunction with one of my colleagues, see every surgical case applying for treatment. Our casualty department is very large, upwards of 160,000 patients attending yearly. Of this large number of patients, I cannot recollect during the whole time to have seen a single example of primary venereal disease in a child, and certainly not half a dozen cases between the ages of twelve and fourteen. If St. Bartholomew's is to be taken as a type of a London hospital, the statement that "in eight years, in three London hospitals alone, 27,000 children between the ages of eleven and sixteen had been treated for terrible diseases," is not only misleading, but absolutely false.—I am, Sir, yours truly,

HARRISON CRIPPS,

June 29th, 1885. Assistant Surgeon to St. Bartholomew's Hospital.

THE FIRST APPENDIX TO THE "MEDICAL DIGEST."

To the Editor of THE LANCET.

SIR,—Considering that during the past four years so much has been written on medical science, it has been suggested that it would be acceptable to many if the first appendix to the "Medical Digest" were to be issued at the end of 1885, instead of at the close of 1886, as originally proposed. I wish upon this point to elicit the opinion, through your journal, of those interested in the subject. A post-card addressed to myself or to the publishers, Messrs. Ledger, Smith, and Co., St. Mary Axe, E.C., expressive of such opinions, and noting at the same time any needed corrections in the edition of 1882, will oblige,

Yours truly,

RICHARD NEALE, M.D. Lond.

60, Boundary-road, South Hampstead, N.W., June 27th, 1885.

LIVERPOOL.

(From our own Correspondent.)

HOSPITAL SUNDAY AND SATURDAY.

THE Hospital Sunday collections amounted this year to £6555, a falling-off from last year's of £840. The Saturday collections show an increase of £66. The Committee divided £8880 among the charities; the Royal Infirmary and Lock Hospital receiving £2220, the Royal Southern Hospital £1332, the Northern £1154, the Dispensaries and District Nursing Society each £621, Infirmary for Children £532, Eye and Ear Infirmary and Stanley Hospital each £444, the Ladies' Charity and Lying-in Hospital £355, and the remainder among smaller institutions. There is every reason to expect a considerable increase in the Hospital Saturday Fund next year, the organisation among the working men having been greatly strengthened and improved.

MEDICAL OFFICER OF HEALTH'S ANNUAL REPORT.

The annual report of Dr. Stopford Taylor for 1884 has been published, and is a very elaborate document. Dr. Taylor is able to commence with the gratifying announcement that the year 1884 will be memorable for the low death-rate of the city, which was for the whole year equal to 25·1, ranging from 23·2 for the first quarter to 27·4 for the third quarter. The number of deaths was 692 less than in 1883, and 446 below the average of the last ten years, notwithstanding the increase of population; the decrease being most marked in those from lung diseases, including phthisis, which were 569 fewer than in 1883. Dr. Taylor attributes this to the increased temperature of the year. The deaths from diarrhœa were 841, the average being 704. Small-pox prevailed extensively throughout the year, there being 74 cases reported in January, in February 59, March 60, April 63, May 154, June 189; the disease began then to decline, the number of cases in July being 108, August 47, September 17, October 10, November 15, December 36. In all 832 cases were reported, and of these 686 were taken to Mill-road Hospital, 57 to the City Hospital, and 89 were treated at home. The number of deaths from typhus, typhoid, and all forms of continued fever was 205 out of a total of 964, being the lowest number of deaths ever recorded in the city, the average for the previous ten years being 402. The report contains many other matters of interest which must be left for future notice.

MEMORIAL TO A DECEASED MEDICAL PRACTITIONER.

The sum of £126 was recently subscribed for raising a memorial to the late Dr. Crichton, of Walton, and it was resolved to apply the fund towards the erection of a monument in the Walton Cemetery. A monument of polished red granite in the form of an obelisk has been placed over his remains, with the following inscription:—"In affectionate remembrance of Duncan Crichton, M.D., who died Dec. 18th, 1884, aged forty-three years. This memorial has been erected by his friends and patients, in testimony of his singular devotion to an arduous profession, his solicitude for the relief of the suffering, and his kindliness of manner to all who knew him." On the right-hand side is inscribed "Multis ille bonis flebilis occidit;" and on the left-hand side, "Non ut diu vivamus curandum est, sed ut satis." It is ungracious to criticise the work of friends freely and voluntarily rendered; but it is much to be regretted that a less pretentious monument, one which would have been more in accordance with Dr. Crichton's modest and unassuming character, was not selected. The cost would have been less, and the balance might very suitably have been applied towards a "Crichton scholarship" or prize at his *alma mater*, Glasgow University.

SINGULAR DEATH AT SOUTHPORT.

On the 29th ult. the body of a man, who had been left in sole charge of the house of a lady in Southport, was found there by a police constable in an advanced state of decomposition. He was last seen alive on May 4th, and when found was fully dressed, in a chair near to the fireplace, and there was a paper bearing date May 9th, which was probably the date of his death. At the inquest, which was held on the 30th ult. before Mr. Brighouse, county coroner, Dr. More deposed to making a post-mortem examination, at which the following remarkable appearances were seen:—Against the heart was a bone two inches in diameter, a most unusual occurrence, and only to be accounted for from the fact that a gland in the region of the heart had become ossified. Portions of the heart were covered with small pieces of bone. The immediate cause of death was an effusion of blood on the brain.

THE LOCK HOSPITAL.

A male patient, aged forty-two years, was admitted into the Lock Hospital, under the care of Mr. A. Bernard, on the 20th ult., suffering from extensive sloughing phagedæna of the prepuce, complicated with phimosis. Nearly the whole circumference of the prepuce, from the free margin to a little behind the level of the corona glandis, was involved. He was in a very debilitated condition owing to his irregular life; the foreskin was swollen and painful for more than a month previous to admission. A free incision was at once made through the slough and a little beyond it, when it was found that the glans was also seriously involved. The parts were well cleaned and dusted over with finely-powdered iodoform, a grain of opium was given every four hours with beef tea at frequent intervals, but no stimulants of any kind. On the following day, as the odour continued to be very offensive, Mr. Lowndes suggested charcoal poultices, which completely corrected this. The patient is now making a good recovery; the sloughs have all come away, leaving

the prepuce in appearance as if a neat circumcision had been performed; posteriorly a small portion of the inferior and anterior part which escaped the destructive inflammation alone remains to mar the symmetry of the parts. Fully three-fourths of the glans have been destroyed, but when cicatrisation is fully established the appearance will not be unsightly. The patient has now been twelve days in hospital, and his condition is highly satisfactory, thus showing that stimulants are not necessarily required in these cases. Mr. Lowndes has had under his care two married women suffering severely from tertiary syphilis, in one of whom a considerable portion of the palate has been destroyed. The importance of this lock hospital is well illustrated by these cases, as well as by the fact that within a fortnight after the reopening of the hospital subsequent to the annual cleaning all the beds were fully occupied.

July 1st, 1885.

EDINBURGH.

(From our own Correspondent.)

EDINBURGH FEVER HOSPITAL.

THIS hospital has now been acquired by the Town Council from the managers of the Royal Infirmary for a sum of £4,000. The general management of the institution will probably be placed in the hands of a special committee of the Council, who will forthwith make permanent arrangements for the hospital administration. In the meantime, all the members of the present staff have been requested to retain office, and it is anticipated there will be no difficulty in connexion with the transference of authority from the one governing body to the other. There will probably be a considerable addition to the numerical strength of the staff, as the buildings have been greatly extended, and the average number of patients is likely to be largely augmented by the admission of those fever cases which have till now been accommodated in the Royal Hospital for Sick Children.

INCREASED HOSPITAL ACCOMMODATION.

The managers of the Royal Infirmary having thus got rid of the onus of maintaining the Fever Hospital, have decided to fit up and open immediately an additional ward. This will be a great boon to the Medical School as a teaching institution, as well as a gain to the public at large, for the steady and rapid increase in the number of students which has been going on for years has made it increasingly important that the basis of clinical instruction should be greatly widened, and that the ground covered by the student in his practical study of disease should be increased. Another great gain in connexion with this matter is the closing of the fever wards in the Sick Children's Hospital. These wards, which contain about 40 beds, will be re-opened for general cases after an interval, in which they will be thoroughly disinfected and refitted; and this provision along with the two University lectureships on the Diseases of Children recently established at this hospital, will greatly enhance its value as a teaching institution, and will provide great additional scope for clinical work.

FINAL M.B. EXAMINATION.

The first list of successful competitors in the final M.B. examination has been posted. Out of sixty candidates forty have passed the examination, and four of these have been awarded distinction. The commissioners appointed by the General Medical Council have been present at all the oral examinations, and have taken careful notes of the procedure. Their presence has neither tended to make the ordeal less awe-inspiring for the competitors, nor has it lightened the task of the examiners in eliciting knowledge from the candidates; but the result of their observations will be keenly looked for by all interested in the University, whether as rivals or as supporters.

FAITH-HEALING.

Faith-healing has broken out in Edinburgh. Mr. Boardman, of London, with the Rev. Mr. Simpson, of New York, and a number of ladies, have been holding "conferences" during the week in Edinburgh. Reports of the first meeting state that the proceedings were of the usual description, but that no "testimonies" were given at the close of any one having been healed during the afternoon's conference. Is Edinburgh going to prove too faithless for the production of "testimonies"?

GLASGOW.

(From our own Correspondent.)

VITAL STATISTICS: SMALL-POX FROM LONDON.

THE report on the health of the city of Glasgow for the fortnight ending 20th June shows that during that time there were 467 deaths registered, representing a death-rate of 23·4 per 1000 living, as compared with 500 deaths (a rate of 25 per 1000) for the previous fortnight. With regard to zymotic diseases, the most interesting point noted is that there were two cases of small-pox registered, both removed from the same house, situated in one of the western districts. The first case occurred in the person of a fireman on board a steamship sailing from Calcutta to London; at the latter port the man was discharged on 22nd May, remained there till the 29th, came down to Glasgow, and on 8th June was removed to hospital with confluent small-pox. He was unvaccinated, and died. In January last, Dr. Russell reported a precisely similar case of small-pox, brought from London by a seaman, and every year several cases of importation have been for some years back brought under notice. From observation of like outbreaks in various parts of the country, traced to the metropolis, it is obvious that the continuous prevalence of small-pox there is a standing menace to the whole country, and a matter of serious national interest.

OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.

The profession in Glasgow is to be congratulated on the increasing interest shown by its members in the scientific aspects of medical work. This is seen markedly in the prosperity and number of its medical associations. The Medico-Chirurgical, the Pathological and Clinical, and the Southern Medical Societies were never more active than at present; the Philosophical Society (to a very considerable extent a medical society) is flourishing; and now we have founded, under most promising auspices, an Obstetrical and Gynæcological Society. I understand that this is intended to be a really working society, and that its membership is to be limited to fifty, a number already made up. The immediate discussion of fresh specimens is to be regarded as a principal part of the Society's work. Its members are to be termed "Fellows," as in the case of the Edinburgh and London Societies. The list of office-bearers for 1885-6 was published in THE LANCET a week ago.

GLASGOW SOUTHERN HOSPITAL.

The scheme for the erection of a hospital on the south side of Glasgow is again before the public. Two or three years ago the matter was taken up by a large and influential committee, and seemed to be about to come to a successful issue, when it was announced that a wealthy Glasgow merchant had died and left a very large sum to be devoted to the building of a hospital and convalescent home on the south side of the city. This put an end to the public agitation of the question, which was then left entirely in the hands of the trustees on the estate referred to. Recently, however, it became known that the sum to be obtained in this way was much over-estimated, and moreover would probably not be available for a very considerable time. A committee have therefore taken up the proposal again, and have already made encouraging progress in the way of getting subscriptions. A sum of about £7000 has already been secured, with which it is intended to begin at once the building of a part of the hospital, containing three wards, with accommodation for over 50 patients. The site bought is a most suitable one, in the spare ground attached to the Queen's Park, and on the spot on which was fought the famous battle of Langside; the ground was granted by the Corporation of Glasgow on most favourable terms. Very few have any doubt as to the need there is for such an institution, providing hospital accommodation for the southern districts of Glasgow; the main difficulty, keenly felt in "dull times," will be in raising funds; but, as already stated, this is in a fair way of being satisfactorily solved. The public of Glasgow may be trusted to see that so beneficent a scheme shall not fall to the ground.

THE SPIRIT DUTIES AND THE INFIRMARIES.

One of the many singular results of the recent political crisis is that our infirmaries have a prospect of benefiting to some extent by the rejection of the proposed addition to

the spirit duties. It is suggested that the drawback refunded by the Exise authorities on spirits taken out of bond at the increased duty, should not be pocketed by the spirit merchants as unearned profit, but should be given to local charities. Already several publicans have responded to the appeal; if the response becomes general, the amount so raised will be very considerable. The idea is one worth adoption over the whole country.

PROFESSOR GAIRDNER ON MEDICAL EDUCATION.

On the 27th ult. Professor W. T. Gairdner, M.D., Professor of Medicine in the University of Glasgow, delivered an address on "Medical Education" in the College Hall of University College, Dundee, on the occasion of the distribution of prizes to the students at the close of the session. In the course of his address he advocated the establishment of a Medical School in Dundee incorporated with St. Andrews University, and sketched out the lines on which, in his opinion, the proposed Medical School should be conducted. Scientific training would be given in the classes at University College, and the practical training would be carried on contemporaneously in the Royal Infirmary, where he suggested there should be hospital tutors, who would illustrate the lectures given at the College by cases which happened to present themselves in the infirmary.

THE COLLEGE ELECTION.

ON Thursday last the election of members of Council of the Royal College of Surgeons was held in the Library of the College. The result was as follows:—

Mr. SAVORY	182,	including	42	plumpers.
Mr. PEMBERTON	140	„	12	„
Mr. MACNAMARA	127	„	4	„
Mr. Gant	73	„	3	„
Mr. Cowell	54	„	16	„
Mr. Mason	52	„	3	„
Mr. Rouse	41	„	1	„

Mr. Savory was therefore re-elected, and Messrs. Oliver Pemberton and Macnamara were elected members of the Council. Three voting papers were invalidated through informality.

Obituary.

SURGEON RICHARD GILPIN COOPER,

INDIAN MEDICAL SERVICE, 2ND SIND HORSE.

THE name of yet another medical officer is to be added to the long list of those who have fallen victims to disease contracted in the performance of their duties. Surgeon Cooper was educated at Malvern School, and joined St. Bartholomew's Hospital in May, 1876. He was a great favourite as a student, and was well known in the cricket-field, having been captain of St. Bartholomew's Hospital School Eleven. After obtaining the M.R.C.S. and L.S.A. Lond., Mr. Cooper competed successfully at the examination for commissions in H.M.'s Indian Medical Service in February, 1881, and left England for Bombay in October of that year. On arrival in India, after a short stay in the Presidency town, he was attached to the 89th Princess of Wales Own Fusiliers, then stationed at Belgaum; he was afterwards appointed to the medical charge of the 3rd Bombay Light Infantry; and finally, about eighteen months ago, he was posted to the medical charge of the 2nd Sind Horse at Jacobabad.

On the appearance of cholera recently in the Lower Bolan, Mr. Cooper was sent to Rindli to assist in treating the victims of the outbreak; but he had hardly commenced work in the camp when he was taken ill, and ordered back at once to Jacobabad. On the journey thither the symptoms pronounced themselves as those of cholera, and the attack terminated fatally on the evening of June 1st, shortly after he had reached Jacobabad.

A warm and trusty friend, a keen and thorough sportsman, as a surgeon able and discriminating, gentle and kind (when needs be as a woman), Mr. Cooper was only known to be liked, and by all who were privileged with his friendship he was regarded with the deepest affection.

Surgeon Cooper, who was only twenty-seven years of age at the time of his death, was married a little more than a year ago to Miss Ashburner, daughter of Major-General Ashburner of the Bombay Army, whom he leaves to deplore her loss, and who may rest assured of the truest sympathy from all who knew the subject of this notice.

Medical News.

UNIVERSITY OF CAMBRIDGE.—At the recent examinations for degrees in Medicine and Surgery the following candidates satisfied the Examiners:—

BACHELOR OF MEDICINE (3rd exam.), Part I.—Ds. Anderson, Caius; Ds. Andrews, St. John's; Ds. Brushfield, Caius; Ds. Burd, Caius; Ds. Daniels, Trinity; Ds. Emerson, Clare; Ds. Facey, St. John's. Mag. F. M. Haig, Trinity; Ds. H. B. Harris, Christ's; Ds. H. A. Haviland, Pembroke; Ds. H. C. W. Jones, Downing; Ds. Lynch, Caius; Ds. Nichol, Caius; Ds. Nicholls, St. John's; Ds. Niven, Caius; Ds. P. C. Scott, St. John's; Ds. Smart, Caius; Ds. Trott, Caius; Mag. Walsham, Caius; Ds. Wishaw, Cavendish.

BACHELOR OF MEDICINE (3rd. exam.), Part II.—Ds. Anderson, Trinity; Ds. Bull, Caius; Ds. J. M. Clarke, Caius; Mag. W. Fowler, Caius; Ds. Hillier, Caius; Ds. Reid, Cavendish; Ds. S. M. P. Roberts, Christ's; Ds. Stericker, Clare; Ds. F. C. Wallis, Caius.

BACHELOR OF SURGERY.—Ds. Andrews, St. John's; Mag. Haig, Trinity; Ds. Lynch, Caius; Ds. Nichol, Caius.

During the academical year 1884-85 the number of those who obtained the degree of Doctor of Medicine was 10, that of Bachelor of Medicine 27, and that of Bachelor of Surgery, 9.

UNIVERSITY OF DUBLIN.—At a meeting of the Senate held last week the following degrees were conferred:—

LICENTIATE IN SURGERY.—Daniel Conway.

BACHELOR IN SURGERY.—William Ambrose Ardagh, John Thomas Bouchier-Hayes, Alexander James Boyd, John Marshall Day, Robert L. S. Donaldson, Edward John Farmer, Cathcart Garner, Edgar Hogben, Robert Ker Johnston, Robert John Montgomery, William Pringle Morgan, Alexander Stoney Patton, Walter Croker Poole, George Thomas Revington, John Joshua Russell, Arthur Ernest Switzer, Thomas Du Bedat Whaite, John Darley Wynne.

BACHELOR IN MEDICINE.—William Ambrose Ardagh, John Bouchier-Hayes, Frederick A. G. Davis, John Marshall Day, Augustus Edward Dixon, William Sinclair Dobbin, Robert L. S. Donaldson, William Ireland Donaldson, Alexander Findlater, Cathcart Garner, Edward Wolfenden Gray, Henry John Hadden, Edgar Hogben, William Leah, William Pringle Morgan, Edwin Graves Newell, Alexander Stoney Patton, Walter Croker Poole, George Thomas Revington, John Joshua Russell, Whitley Bland Stokes, Arthur Ernest Switzer, Thomas Du Bedat Whaite, John Darley Wynne.

DOCTOR IN MEDICINE.—Francis George Goodman, Thomas Harrison, William Francis Law, James Ferrier Pollock, John Edward Blakeney Purdon, Rogers Taylor.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 25th ult.:—

Baronoff, Parounag Jean, Guilford-street, Russell-square.
Bigger, William Grimshaw, M.R.C.S., Riverview, Londonderry.
Hutchinson, Procter Selby, M.R.C.S., Cavendish-square.

On the same day the following gentleman passed his examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received a certificate to practise:

Rigg, Vincent John, White House, Fillongley, Coventry.

DR. PAINE, who has been medical officer to the County Prison at Cardiff for over twenty-five years, has been granted a retiring pension of £100, being one-third his salary.

A MARBLE bust of Dr. Paget, Regius Professor of Physic at the University of Cambridge, which has been subscribed for by his pupils (past and present) and friends, was on the 29th ult. presented to Addenbrooke's Hospital.

DR. QUINET, a Belgian physician, who was tried at Paris on the 25th ult. for seriously wounding with a revolver a banker's clerk who had induced his wife to leave her home, was acquitted.

THE death is reported of Dr. Donald Stuart, district surgeon of Fraserberg, Cape of Good Hope, at the early age of thirty-one. Dr. Stuart succumbed on May 1st from an attack of typhoid fever.

INTELLIGENCE has arrived of the unexpected death of Dr. Davis Porter, army surgeon, at Wady Halfa, Egypt. He was nephew of the Rev. Dr. Porter, of Queen's College, Belfast, and volunteered for the Soudan, being attached to the 4th Dragoon Guards. He was the principal of the Wady Halfa Hospital, where he died from dysentery.

UPWARDS of 600 guests were present at a conversazione given on the 1st inst., in the College buildings, by the President, the Council, and staff of the Bristol University College, together with the governing body and faculty of the medical school.

AT an inquest held on the 25th ult. at Brixton on the body of a solicitor who had been accustomed to drink chloral, the jury returned a verdict to the effect that death was due to shock and exhaustion arising from a fall while under the influence of that drug.

ON the 27th ult., Sir James M'Garel-Hogg, M.P., laid the top stone of a block of artisans' dwellings at Camberwell. The buildings, which have been formally named the "Gordon Dwellings," are erected in four sections, each being five storeys in height, the whole comprising 125 rooms, which will be let to fifty families.

ROYSTON COTTAGE HOSPITAL.—From the recently issued report of the committee of this institution, it appears that at the commencement of 1884 there were three patients in the hospital, and that during the year forty-four fresh cases were admitted. The average stay in hospital of each patient was 28½ days, and the average daily cost was 3*s.* 5½*d.* The total receipts amounted to £291.

FOREIGN APPOINTMENTS.—Dr. Wernicke has been appointed to the chair of Psychological Medicine in Breslau. —Dr. Steinbrügge, formerly *privat docent* in Heidelberg, has been appointed to the charge of the Otological Department of the Polyclinic of the University of Giessen.—The Russian Academy has elected Professor N. N. Beketov, of the University of Kharkov, an honorary member on the occasion of his jubilee.

ON the 26th ult. a meeting was held at Bishop Auckland for the purpose of taking into consideration the desirability of setting on foot, as an experiment for two years in that town, some system of properly trained nursing for the poor similar to that in operation under the auspices of the National Association for Training Nurses, &c., in London, and other benevolent societies. A committee was formed to carry out the project.

ROYAL COLLEGE OF PHYSICIANS.—The annual conversazione of this institution was given on the 1st inst., the number of guests being as usual large. Among those present were Sir James Paget, Sir William Gull, Sir Joseph Fayrer, Dr. Quain, Mr. J. Cooper Forster, President of the Royal College of Surgeons; Mr. Savory, Mr. Durham, Surgeon-General Mackinnon, Surgeon-Major G. F. Hume-Spry, Dr. Longstaff, the Hon. G. Brodrick, Warden of Merton; the Rev. Dr. Wace, Principal of King's College, London; and Alderman Sir J. C. Lawrence, M.P. In addition to a loan collection of paintings and water-colour sketches, there were some interesting scientific and rare and curious books and manuscripts from the library exhibited.

PRESENTATIONS.—During the winter months a series of most interesting and instructive lectures bearing upon the subjects of General Nursing, First Treatment of Accidents, &c., were given by Dr. Steele-Perkins to large classes, principally composed of the ladies and gentlemen living in the immediate neighbourhood of Coventry and Bedford Parks, Streatham. The numbers attending reached the high figure of upwards of ninety; and the appreciation with which these lectures were received was pleasingly shown by the presentation to the Doctor on the part of the pupils of a handsome drawing-room clock, accompanied by an illuminated scroll bearing the names of the donors.—On the 15th ult. Dr. M'Cosh was presented by the nurses of the Dundee Royal Infirmary with a reading-lamp, in recognition of the completion of the tenth year of his superintendence of that institution.

VACCINATION OFFICERS' ASSOCIATION.—The members of this Association held their ordinary meeting on the 20th ult., at Charing-cross Hospital Medical School. After the usual routine business had been transacted, a paper was read by Dr. Cory on "Some Medical Facts relating to Vaccination on which it is desirable Vaccination Officers should have more extended Knowledge." Dr. Cory illustrated his remarks by diagrams and statistical sheets gathered from small-pox hospitals and other institutions, which most conclusively proved the power of efficient vaccination as a protection from small-pox. One of the most interesting diagrams related to ophthalmic statistics collected from Guy's Hospital, referring to cases of blindness from small-pox. In no instance had the patients been revaccinated, only one case showing marks of primary vaccination—viz., two vaccine cicatrices. The statistics gathered from Highgate and Homerton Hospitals, respectively and independently, show comparatively the same result against the unvaccinated: the mortality ranging from 37·2 against the unvaccinated, as in proportion to 1·1 of those showing four or more vaccine cicatrices in regard to Highgate; whereas in Homerton the mortality of those unprotected by vaccination showed 43·7, against a percentage of 3·2 of those protected by vaccination. Dr. Cory concluded his paper with numerous instances which had come under his personal observation showing the protective powers of vaccination.

A NEW CLINICAL INSTITUTE IN ST. PETERSBURG.—The *Illustratsiya* gives an engraving of a large Clinical Institute which has been erected in St. Petersburg in memory of a late member of the Imperial family. Lectures will shortly be commenced in connexion with the School of Military Medicine, and subsequently it will be ready for the reception of patients.

ASSOCIATION OF MUNICIPAL AND SANITARY ENGINEERS. The annual meeting of this Association was held on the 25th ult. Mr. Vawser, borough engineer of Manchester, was installed as President for the ensuing year, and the report stated that there were now 242 members, 40 having joined since the last meeting. The President delivered an address, in which he dealt with the difficulties of treating town sewage, either by chemical processes or irrigation; he also briefly reviewed the Rivers Pollution Bill, and alluded to the necessity of improved dwellings for the poor, incidentally condemning cottages being built back to back, as creating a difficulty that one day must be faced. Papers were then read on "Street Lighting" by Mr. Crimpo, and on "Sanitary Gas-making" by Professor J. A. Wanklyn; and these having been discussed at great length, the meeting adjourned. It was decided that the next annual meeting should be held at Hanley.

THE THAMES VALLEY DRAINAGE.—In view of the Bill for the dissolution of the Lower Thames Valley Main Drainage Board going before a committee of the House of Lords, the Local Government Board have prepared a report upon the Bill as amended by the House of Commons. Passing in review the clauses of the Bill, the Board direct attention to those clauses under which the existing districts are enabled to form themselves into joint boards, the effect of which would be, as the Bill is at present framed, that after agreements have been made and joint boards constituted, such agreements could not be modified in any of their details, not even by mutual consent, without further legislation. This arrangement is not considered a desirable one. In conclusion, the opinion is expressed that the expenses of the new joint boards should not be met by contributions based on the rateable value of the districts for the purposes of the poor rate, as proposed by the Bill, but on the rateable value of each place as reduced for the general district rate in the urban districts, and for a rate for special expenses in the rural districts.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BRAMWELL, H., M.B., has been elected House-Surgeon to the Newcastle-on-Tyne Infirmary, vice J. Waldy, M.R.C.S., L.R.C.P.Lond., promoted to the office of House-Physician.

CASKEY, J. SHAW, L.S.A.Lond., has been appointed Ophthalmic Clinical Assistant to the London Hospital.

DUNCAN, JOHN THORNTON, M.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Barnack and Ryhall Districts of the Stamford Union, vice Morgan, resigned.

ELLIOTT, WILLIAM, L.D.S.Ed. & Dub., F.C.S., has been appointed Professor of Dental Mechanics in Queen's College, Birmingham.

FENWICK, CHARLES, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer to the Raphoe Dispensary of the Strabane Union, vice R. Little, L.R.C.S.I., deceased.

HEHNER, OTTO, F.C.S., F.I.C., has been appointed Public Analyst for Nottinghamshire, vice Trueman, resigned.

LEWIS, J. KING, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Thorverton District of the Tiverton Union, vice H. Robinson.

NASON, C. ST. STEPHEN RICHARD, M.D., M.Ch.Dub., has been appointed Medical Officer for the Sixth District of the Upton-on-Severn Union, vice Boughton, resigned.

SMITH, FREDERICK JOHN, B.A.Oxon., M.R.C.S., L.R.C.P., Radcliffe Travelling Fellow, 1885, has been appointed House-Physician at the London Hospital, vice W. R. Tackett.

THURSTON, EDGAR, L.R.C.P.Lond., L.S.A.Lond., Curator at the Anatomical Museum, King's College, London, has been appointed Superintendent of the Presidential Museum, Madras.

WILLIAMS, EDWARD, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Eastern District and Workhouse, Billesdon Union, vice Franks, deceased.

Births, Marriages, and Deaths.

BIRTHS.

BOSWELL.—On the 24th ult., at Ashburne, Derbyshire, the wife of Alex. Boswell, M.D., of a son.

DE LA MOTTE.—On the 22nd ult., at Staines, the wife of Peter W. De La Motte, M.R.C.P., M.R.C.S., of a daughter.

MORRIS.—On the 29th ult., at Windhill, Bishop's Stortford, Herts, the wife of John Edward Morris, M.D., of a son.

PIGGOTT.—At Brookside, Clare, Suffolk, on the 21st June, Frances Mary, wife of Edward A. Piggott, L.R.C.P.Ed., L.R.C.S.Ed., L.S.A.Lond.—a daughter.

SEAMAN.—On the 28th ult., at Margate, the wife of Dr. W. C. Seaman, Deputy Inspector-General A.M.D. (prematurely), of a son.

STARK.—On the 13th ult., at Beckett House, Wantage, Berks, the wife of M. Dugald Stark, M.D., C.M., M.R.C.S., L.R.C.P., of a daughter.

STRADLING.—On the 22nd ult., at Flores, Watford, Herts, the wife of Arthur Stradling, C.M.Z.S., M.R.C.S., &c., of a son.

MARRIAGES.

BATTISCOMBE—TAYLOR.—On the 23rd ult., at S. Mary's, Mistley, Christopher George Battiscombe, M.B., C.M., of St. Mary Cray, Kent, third son of the late Rev. Henry Battiscombe, M.A., Fellow King's Coll., Camb., to Mary, second daughter of Charles Taylor, Esq., of Mistley House.

BRADSHAW—SABIN.—On the 25th ult., at Wardington, by the Rev. D. J. Welburn, Vicar, assisted by the Rev. A. G. P. Humfrey, Rector of Thorpe-Mandeville, James Charles Bradshaw, L.R.C.P., L.R.C.S., Sulgrave, Banbury, second son of the Rev. G. Bradshaw, D.D., late of Southampton, to Bessie, youngest daughter of James Sabin, Wardington, Oxon.

GRACE—ROBINSON.—On the 23rd ult., at the Baptist Chapel, Fishponds, Gloucestershire, E. M. Grace, L.R.C.P.Ed., M.R.C.S., Coroner for West Gloucester, to Annie L. Robinson, daughter of Mr. A. Robinson, of Beechwood.

STREET—BROCK.—On the 24th ult., at St. Mary's, Burghfield, Alfred Francis Street, M.D.Cantab., of Westgate-on-Sea, to Alice Grace, daughter of the Rev. T. Brock, sometime Vicar of St. John the Evangelist, Guernsey.

TRESIDDER—HATHORN.—On the 19th ult., at Orange, N.S.W., Harry Innes Tresidder, L.R.C.P., M.R.C.S., of Coonamble, third son of Surgeon-General Tresidder, H.M.I.M.D., to Mary, fourth daughter of the late Major James G. Hathorn, R.A., B.S.O.

WINDLEY—HILL.—On the 24th ult., at St. Mary's Episcopal Church, Glasgow, William Windley, M.R.C.S., of Nottingham, to Barbara Katharine, second daughter of Laurence Hill, C.B., Glasgow.

DEATHS.

HOWARD.—On the 28th ult., at Mindenwolfe, Bedford, Edward Howard, Esq., late H.M. 20th Regiment, Deputy Inspector-General of Hospitals, Army Medical Department, aged 69.

HOWE.—On the 26th ult., at Knowle Vicarage, Warwickshire, John Ernest Howe, B.A. and M.B., Clare College, Cambridge, and M.R.C.S., son of the Rev. John Howe, M.A., Honorary Canon of Worcester and Vicar of Knowle, aged 37.

PRATER.—On the 20th ult., at Devonshire-street, Horatio Prater, M.D., Edwardes-square, Kensington, in his 80th year.

SAMPSON.—On the 27th ult., at his residence, St. Matthew's, Ipswich, George Green Sampson, M.R.C.S., L.S.A.Lond., aged 81.

WOTHERSPOON.—On the 25th ult., at The Green, Lockerbie, John T. R. Wotherspoon, Physician and Surgeon.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

BOOKS ETC. RECEIVED.

APPLETON, D., & Co., New York.

Transactions of the American Gynecological Society. Vol. IX. pp. 408, with Illustrations.

BAILLIÈRE, TINDALL, & COX, London.

Handbook for the Instruction of Attendants on the Insane. Prepared by a Sub-committee of the Psychological Association.

Lectures delivered at the Hospital for Sick Children. By Robert J. Lee, M.A., M.D.Cantab. pp. 182.

CASSELL & Co., London.

Diseases of the Tongue. By Henry T. Butlin, F.R.C.S. pp. 451, with Chromo-lithographs and Wood Engravings.

Comparative Anatomy and Physiology. By F. Jeffrey Bell, M.A. pp. 555, illustrated with 229 Engravings.

Elements of Surgical Pathology. By A. J. Pepper, M.S., M.B., F.R.C.S.Eng. Second Edition. pp. 532, with 84 Illustrations.

CHURCHILL, J. & A., London.

Commercial Organic Analysis. By Alfred H. Allen, F.I.C., F.C.S. Second Edition, revised and enlarged. Vol. I. pp. 476.

Hay Fever, its Etiology and Treatment; with an Appendix on Rose Cold. By Morell Mackenzie, M.D.Lond. Third Edition. pp. 54.

Gout in its Clinical Aspects. By J. Mortimer Granville, M.D., &c. pp. 307, with Illustrations.

CLOWES & SONS, London.

The Health Exhibition Literature. Vol. XVII.: Miscellaneous, including Papers on Japan. Vol. XVIII.: Miscellaneous, including Jury Awards and Official Catalogue. Vol. XIX.: Miscellaneous, including Papers on China. pp. 749—475—496.

GRIFFIN, CHARLES, & Co., London.

Year-book of the Scientific and Learned Societies of Great Britain and Ireland. Compiled from Official Sources. Second annual issue. pp. 231.

HARRISON & SONS, London.

The Nomenclature of Diseases. Drawn up by a Joint Committee appointed by the Royal College of Physicians of London. Second Edition, being the first Revision. pp. 429.

LEWIS, H. K., London.

The Middlesex Hospital Reports (Medical, Surgical, and Pathological) for 1883. pp. 544.

Gout and its Relations to Diseases of the Liver and Kidneys. By Robson Roose, M.D. pp. 158.

On Bedside Urine-testing. By Geo. Oliver, M.D.Lond. Third Edition. pp. 260.

Ringworm, its Diagnosis and Treatment. By Alder Smith, M.B.Lond., F.R.C.S. Third Edition. pp. 228, with Illustrations.

Suicide, its History, Literature, Jurisprudence, Causation, and Prevention. By W. Wynn Westcott, M.B.Lond., Deputy Coroner for Central Middlesex. pp. 191.

LIPPINCOTT, J. B., & Co., Philadelphia.

The Nature of Mind and Human Automatism. By Morton Prince, M.D. pp. 173. Price $1.50.

MAURER-GREINER, J. H., Berlin.

Bath Creuznach: Handbook for Physicians and Visitors. By F. Heusner, M.D. pp. 96, with Illustrations.

NEW ENGLAND PUBLISHING COMPANY, Sandy Hook, Conn.

Berlin as a Medical Centre: a Guide for American Practitioners and Students. By Horatio R. Bigelow, M.D. pp. 117.

OLIVER & BOYD, Edinburgh.

Contributions to the Surgical Treatment of Tumours of the Abdomen. By Thos. Keith, M.D., LL.D. Part I. pp. 104.

PENTLAND, YOUNG J., Edinburgh.

Pathological Mycology. By G. Sims Woodhead, M.B., C.M., and A. W. Hare, M.B., C.M. Section I.: Methods. pp. 174, with 60 Illustrations.

PLON, NOURRIT ET CIE, Paris.

L'Année Médicale, 1884: Résumé des Progrès réalisée dans les Sciences Médicales. Publié sous la direction de Dr. Bourneville. pp. 409.

ROBERTS & LEETE, London.

How to Avoid being Drowned. By F. W. Brewster, M.A. pp. 104, with Illustrations.

SMITH, ELDER, & Co., London.

Surgical Operations. Part I.: The Ligature of Arteries. By Sir William Mac Cormac. pp. 138, with numerous Illustrations.

Dictionary of National Biography. Edited by Leslie Stephen. Vol. III.: Baker—Beadon. pp. 462.

THACKER, SPINK, & Co., Calcutta; W. THACKER, London.

Life: the Explanation of it. By W. Sedgwick Major, B.E. pp. 131.

WOOD, WILLIAM, & Co., New York.

Frozen Sections of a Child. By Thos. Dwight, M.D. Fifteen Drawings from Nature by H. P. Quincy, M.D.

Index Medicus, Vol. VII., Nos. 4 and 5. (G. S. Davis, Boston, Mass.)—Report of the Metropolitan Board of Works, 1884.—Remarks and Notes on the Lunacy Acts Amendment Bill, 1885; by Dominick Daly, Barrister-at-Law. (Flynn, Birmingham.)—Report of the Board of Management of the Pennsylvania Hospital.—Sick Nursing essentially a Woman's Question; by Dyce Duckworth, M.D. (Longmans.)—Cope's Tobacco Leaves for the Smoking-room.—Hastings and St. Leonards as a Health Resort.—Speech for the Dumb; by H. W. White. (Allen & Co.)—Paris Guide and Directory.—Studi Clinici sul Cholera; pel Dr. Nunes-Vais.—Typhoid Fever and Low Water in Wells; by H. B. Baker, M.D.—Nature and Treatment of Sporadic and Epidemic Cholera; by Alex. Harkin, M.D., F.R.C.S. (Renshaw.)—The Pharmaceutical Society of Great Britain—an Impeachment; by George Tanner Hough.—Sugli Innesti Ossei; pel Dr. B. Salvia.—Good Words, Sunday Magazine, for July. (Isbister.)—Sunday at Home, Leisure Hour, Boy's Own Paper, Girl's Own Paper, July. (Tract Society.)—British Gynecological Journal, July.—Deutsche Archiv. f. Geschichte der Medicin; achten Bandes, zweites Heft.—Our recent Debts to Vivisection; by Dr. W. W. Keen.—Report on the Refuse Water of Chemical Works and other Factories of Glasgow; by Wm. Wallace, F.R.S.E., &c.—Nervousness, Heredity, School Pressure and Worry; by B. N. Comings, M.D.—New Britain.—An Account of well-authenticated Miracles; by Geo. Richardson.—Endometritis Fungosa; by Jas. B. Hunter, M.D.—Further Inquiries into the Causes of Pauperism in the Township of Manchester; by Alex. M'Dougall, jun.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, July 2nd, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
June 26	30·21	N.E.	56	52	80	64	52	·02	Overcast
,, 27	30·29	E.	57	52	110	73	48	...	Cloudy
,, 28	30·26	N.E.	59	56	112	75	50	...	Cloudy
,, 29	29·97	N.E.	56	54	101	70	54	...	Overcast
,, 30	30·02	E.	59	53	114	70	53	...	Cloudy
July 1	30·16	S.E.	57	53	102	70	53	...	Hazy
,, 2	30·20	S.W.	60	56	...	...	52	...	Hazy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

WELLINGTON COLLEGE.

An Old Wellington Boy, who appears, as he should be, very devoted to his school, writes to point out that Wellington stands next to Cheltenham in the number of direct admissions into Sandhurst and Woolwich, and thus should not be called unsuccessful in work, and that in the same year old Wellington boys were captains of football at Sandhurst, Woolwich, Cooper's-hill, and Richmond. The point is not what boys do after they have left Wellington, but what they have done on their own cricket and football grounds in fair competition with other schools. Has Wellington ever been beaten Rugby, Winchester, Harrow, or Eton? We recommend Wellington boys to aspire to answer in the affirmative. Our correspondent also calls in question the accuracy of our statement that Wellington is on a low-lying plain, and adjacent to the extensive marshes which stretch from Sandhurst to Frimley. If reference be made to a map of the Geological Survey of Great Britain, it will be seen that our statements in this respect are correct. These marsh lands are identical in their geological formation with the marshes of Cambridgeshire, Lincolnshire, and Yorkshire, and are, like them, malarious.

Mr. James Hall.—It would be contrary to our rule to express an opinion on a matter about to be brought before a court of law.

"ANGULAR CURVATURE" OF THE SPINE.

To the Editor of THE LANCET.

SIR,—I regret to find in the revised second edition of "Nomenclature of Diseases," just issued, that the above term has been retained. There are many objections to its use. Amongst others, the condition of deformity seldom assumes an angular shape; then the distortion is merely one feature of a state of disease, and is not always present; again, there is no such thing as an angular curve—to speak of such a combination is not less absurd than would be the allusion to a circular square. I am aware that there is an objection to alter names that have become established by custom; but there is at command the old title, "Pott's Disease of the Spine," which is in every way a desirable one. If the term "angular" is considered necessary, then "deformity" can be substituted for "curvature."—I am, Sir, yours obediently,

Grosvenor-street, W., June 24th, 1885. F. R. FISHER.

CHAMPAGNE JELLY.

To the Editor of THE LANCET.

SIR,—The above is frequently made in the same way as calf's foot jelly, using champagne instead of sherry. If "Physician's" patient has not already tried it, I would suggest "Gallard's Ivory Jelly," which can be supplied with or without sugar.—I am, Sir, yours faithfully,

Princes-street, W., June 29th, 1885. G. VAN ABBOTT.

A QUESTION OF ETIQUETTE BETWEEN A PRACTITIONER AND A PATHOLOGIST.

MR. G. H. PINDER of Broughton and Dr. Thomas Harris of Manchester have had a correspondence in reference to the following circumstances. A patient of Mr. Pinder's (a lady) died, apparently of malignant disease of the liver. At the request of her eldest son, Mr. Pinder agreed to make a post-mortem examination. After doing so he received a letter from a younger son, saying, "We have requested Dr. Harris of the Manchester Infirmary to conduct the post-mortem," and asking him (Mr. Pinder) to meet Dr. Harris at whichever of two times mentioned was convenient to him. Mr. Pinder felt hurt at being so treated, and declined to have anything further to do with the case. The correspondence has been sent to us for our opinion on the merits of the controversy, Dr. Harris maintaining that he had committed no breach of etiquette. We are quite sure he intended none; but in the main we agree with Mr. Pinder's view of the etiquette of the case. A family is quite entitled to have the best pathological opinion post mortem, just as it is entitled to the best medical opinion during life. No medical man should object to this, and Mr. Pinder distinctly says he would not. But the regular attendant should be consulted in the matter, and any stranger introduced should be asked to co-operate with him. It is to be regretted that Dr. Harris did not enlighten the younger son as to the course to be pursued, or write at once to Mr. Pinder. Surely, it should have struck him as a very unusual thing, in a case where there was no suspicion of foul play or malpractice, to have the regular attendant so completely subordinated in an arrangement for a post-mortem examination. At the same time, we do not think that he intended any discourtesy to Mr. Pinder. We should also acquit the younger relative of such an intention; but he should leave such questions to the arrangement of his elder brother.

Fait.—The appointments are made, we believe, by the Secretary of State for the Home Department on the recommendation of Sir E. Du Cane. We are not aware of the age at which retirement is compulsory.

EPIDEMICS IN SOUTH AFRICA.

To the Editor of THE LANCET.

SIR,—Will you kindly find space in your journal for the following questions?

1. Why should cancer be so common amongst the European population of South Africa, and more especially amongst the Dutch section of that population? 2. Why should Bright's disease be so frequently met with amongst the same population, attacking persons of all ages? 3. Why is it that disease generally, in almost every shape and form, assumes so rapidly what may be termed the degenerating type? 4. Why is it that South Africa is scarcely ever free from some form of epidemic or contagious disease, either attacking man or beast?

To what extent can habit operate in promoting such a general state of things? To what extent do the elements operate in promoting such degenerate conditions (intermarriage is very common amongst the Boers)? To what extent can the water of springs deficient in earthy salts and the water of rivers charged with alum or clay operate in promoting such a general degenerating type or state of the European constitution? To what extent do preserved meat and vegetables act as a factor in the same direction?

It may be stated that cancer is almost unknown amongst the natives in their native homes. It should also be stated that cancer is more prevalent amongst the fixed population than amongst the pure nomadic class, as also diseases generally. It might also be stated that wounds heal very well, and that persons recover from severe injuries remarkably well; but should any unfavourable symptom happen, mortification is very rapid, and tetanus is common, both traumatic and idiopathic. These remarks apply to natives more perhaps than to Europeans. Blood-poisoning is also very common. Snake poison may be said to be more rapidly fatal to Europeans than to natives.

I am, Sir, yours truly,

June, 1885. J. CANTWRIGHT REED, M.D.

F. W. T.—Disinfection by heat is the most satisfactory method. Moist heat is best applied by the steam pressure stove manufactured by Mr. Washington Lyon of London, and dry heat by the Ransom stove manufactured by Messrs. Goddard and Massey, Engineers, Nottingham. The steam process has the great advantage of rapidity of penetration; the special feature of the hot-air process referred to is that it is automatic in its action.

"PORTER, GARDENER, *AND* DISPENSER."

To the Editor of THE LANCET.

SIR,—Mr. Woodland's letter reminds me that once as house-surgeon I was fortunate in having for henchman a porter who acted as barber—typhus heads were all shaved—and dispenser too. At minor surgery he was held *facile princeps*, and teeth he extracted *secundum artem*. He was a man fertile in resource. Running short of ipecacuanha wine, he remarked to me in a barely interrogative way, "A'll pit in some antimony; it's esononymous." I am, Sir, yours faithfully,

June 30th, 1885. W. McL.

MEDICAL INSTRUCTION IN MADAGASCAR.

MR. RAJAONA, writing in "Medical Missions" from Antananarivo, Madagascar, says: "Medical classes of about seventy young men have been commenced, and are progressing very favourably, and about sixty or seventy young women are also being trained to be nurses and midwives; so I have a class of about 140 young people to whom I must give lectures. Besides these, I see from 60 to 150 patients in the dispensary every other day, and we have many operations. In one year I had 145 major operations (amputations, lithotomy, &c.), and only 9 died. Besides all these, I have to go to the palace every day to attend the Queen and Prime Minister. One of the missionaries of the Society for the Propagation of the Gospel has promised a large surgical case to the best of my pupils in Anatomy, and the Queen is to give two or three for Midwifery and Physiology, and it is a very exciting time with the students just now as to who shall gain the prizes. It is most wonderful the answers they give to the same questions we used to get in Edinburgh." Further on the writer mentions that he is about to marry a daughter of the Prime Minister, who is, of course, a step-daughter of the Queen, the Prime Minister being her Majesty's husband.

Dr. C. F. Knight will see elsewhere some remarks suggested by the correspondence he sends us. On the second point raised, that of forfeiting one diploma for the other, we are of opinion that there is not much unreasonableness in the view of the Committee of the Senate. The case is an exceptional one, in which one university supersedes another, and in which it seems but reasonable that one degree should supersede another—in other words, that there should not be two sets of equivalent degrees.

Mr. Mills.—The matter shall receive attention.

J. C. Truman is referred to our advertising columns.

COCAINE IN THE TREATMENT OF HAY FEVER.

To the Editor of THE LANCET.

SIR,—I am desirous, with your permission, of calling attention to the value of tabloids of cocaine in the treatment of hay fever. I feel that I can speak with confidence on this point, as I have for many years been a sufferer from this distressing affection, and the observations were made moreover upon myself. The attacks in my case usually commence about the last week in May, and continue without intermission until the end of July, the discomfort and inconvenience experienced being so great that during the summer months I am practically incapacitated for work. The most prominent symptom is sneezing, which comes on in paroxysms, and is liable to occur at any moment, night or day. The attacks are most severe and persistent, and are entirely uncontrollable, so that over and over again I have been obliged to leave the lecture theatre or a place of amusement, and go home and lie down. They are accompanied by great shortness of breath, during the persistence of which any exertion is impossible; the exhaustion produced is so great that the whole body is bathed with perspiration, and there is generally a feeling of faintness, accompanied by dimness of sight, and often a staggering gait if an immediate attempt be made to walk. Other symptoms are itching and irritation of the nose, with smarting and tickling of the mucous membrane of the nares and septum. There is an irresistible desire to violently rub the offending member with a coarse pocket-handkerchief, although painful experience has taught me that it ultimately intensifies the trouble and irritation, which return with redoubled vigour immediately after the application. At the same time there is a copious secretion of acrid mucus, which acts as an irritant, and inflames the surface with which it comes into contact. The eyes are usually suffused with tears, and there are tickling and itching of the margins of the lids, which are pressed tightly together in the vain hope of obtaining relief. The hard palate burns and itches so intensely that the tongue has to be forced backwards against it in order to allay the irritation. All these symptoms are greatly intensified by heat or sunlight, and by dust of all kinds. The pollen of hay, either growing or stacked, is perhaps the most powerful exciting cause, but minute particles of any kind floating in the air will act in the same manner. Even the starch from a freshly washed and ironed handkerchief will suffice, unless carefully shaken out before being used. The susceptibility is so great that until lately no remedy which was tried—and the list was a long one—appeared in any way to control the course of the disease. A fortnight ago I was induced to use the tabloids of cocaine for the first time, and the relief they have afforded me has been so marked that I cannot feel sufficiently grateful for the introduction of this remarkable remedy. One tablet, containing a sixth of a grain of the hydrochlorate, is slightly moistened in the mouth, and is then introduced into each nostril. They adhere without the slightest difficulty, and cause no pain or irritation of any kind; but the relief is immediate and complete. During the last fortnight I have used twenty-four tablets, and have been practically free from my old complaint, although I have spent much of the time out of doors and under circumstances which without my remedy would have been impossible. I am grateful for the relief I have obtained, and am therefore desirous to lay this plain statement of facts before your readers, in order that it may be brought to the notice of my fellow sufferers.

I am, Sir, yours truly,

Westminster Hospital, S.W., June 29th, 1885. JOHN WATSON.

THE A B C SEWAGE PROCESS.

THE experiments recently carried out by Dr. Meymott Tidy and Professor James Dewar at Aylesbury for the purpose of determining the conditions and efficiency of the A B C process in the treatment of sewage having been completed, an abstract of the results of the inquiry has been published. The investigation extended over a period of three months, and the results therefore represent the everyday working and efficiency of the process. The following are the main facts established by the inquiry:—(1) That the A B C process produces a clear effluent free from suspended matter and devoid of smell; (2) that the effluent is uniform, notwithstanding the very varied nature and concentration of the sewage; (3) that as the strength of the sewage increases, the precipitation is more complete; (4) that the process removes over 80 per cent. of the total oxidisable organic matter; (5) that it precipitates 60 per cent. of the organic matter in solution, and of the residue left in the effluent at least two-thirds are non-albuminous, and therefore of a nature less liable to putrefactive and other changes; (6) that the process is carried on without nuisance, the sewage being immediately and completely deodorised, and the entire works free from any objectionable smell; and (7) that it produces a manure containing an average of 3·8 per cent. of ammonia calculated on the perfectly dry manure, or if with 20 per cent. of water 3 per cent. of available ammonia, and also 5 per cent. of phosphates reckoned as tricalcic phosphate of lime.

Mr. A. B. Calder.—The apparatus may be ordered at Stall 2021, Group 26, of the International Inventions Exhibition. The price, we believe, is £1 1*s*.

W. B.—Our space is too fully occupied at present.

AN UNUSUAL CASE OF CONGENITAL MALFORMATION.

To the Editor of THE LANCET.

SIR,—The following case occurred in my practice a short time ago, and from the unusual character of the deformity I think it may prove interesting to your readers.

I was called on the night of May 4th to attend Mrs. ——, aged thirty-three, in her eighth confinement. She is a particularly fine, healthy-looking woman, and her husband a fine, burly Scotchman. They occupy a comfortable position in life. The uterus was very large and the pains severe. The os being fully dilated, I ruptured the membranes, and shortly afterwards birth was given to a rather small, but healthy and perfect, female child. On examination, I found another head presenting, and the second child quickly followed. It cried lustily, but on tying the cord I found it deformed. In size it was small, weighing barely 5 lb. From the pelvis, attached by fleshy pedicles (about an inch in breadth by half an inch in thickness), were two masses resembling feet, four inches long by two inches and a half at the broadest part. On each foot were six toes. On the right foot they formed an inverted V, the centre toe being small and ill-developed. The nails were perfect on all the toes. The calcaneum could be distinguished about the centre of the mass, and behind it some larger bones, probably those of the leg in an ill-developed condition. The genitals were large and well formed, though a good two inches from the anus. The trunk and arms were in a normal condition, but the hands presented the peculiar characteristic of having five fingers on each, but no thumbs. On the left hand the first finger had a tendency to come into apposition to the others, the inter-digital space being much larger than the remainder; but on the right they were quite regular, and had no such disposition. Both wrists were slightly flexed. The only other peculiarity of the child was that the neck on the left side was much shorter than on the right, otherwise it was well nourished. Fortunately for the parents and the little one itself, it only survived about forty-eight hours. Directly after birth the lower dependencies became cold and black, and it was impossible to infuse warmth. The mother can give no history whatever of fright or shock, or of any impressions out of the common, occurring during pregnancy to account for this "freak of nature." All her other children are healthy and well formed, and there is no history of anything approaching deformity in either her family or that of the father. I am sorry I was unable to obtain a post-mortem examination. I am, Sir, yours faithfully,

Balham, June 11th, 1885. B. G. GODFREY, L.R.C.P., &c.

OVULATION *versus* MENSTRUATION.

To the Editor of THE LANCET.

SIR,—Referring to this subject in your issue of June 13th, I am happy to testify that ovulation and menstruation is the general rule, but not necessarily a condition of pregnancy. I have met with women, although at puberty, who have never menstruated, becoming pregnant. My experience teaches me that ovulation and conception without the menstrual flow is not an uncommon occurrence; this I have observed occurs more often in women who become pregnant whilst suckling, and especially in those who postpone weaning the child. The last case I observed occurred on June 21st, in a patient twenty-nine years of age, mother of three children, who miscarried at three to four months, and who had only just weaned her baby seven months old. She distinctly stated she had had no discharge of any character for sixteen months. If this occurs once, there is no physiological reason why it should not take place again and again in the same patient.

I am, Sir, yours truly,

West Hampstead, June 30th, 1885. A. O. GROSVENOR, M.D.

A REMARKABLE ESCAPE.

THE *Port Elizabeth Telegraph* of April 25th relates the following incident, which recently occurred on the Diamond Fields. "A native had been beaten almost to death by another coloured man, who, taking him for dead, buried him beneath a heap of stones. The body was exhumed for the purpose of holding a post-mortem examination, and the doctor who was to make it had laid out his instruments. With his surgical knife in one hand he placed the other over the region of the heart to commence operating, when he felt the heart pulsating. The worthy medico cased his instruments, and the man was sent off to Kimberley, where the 'case' is now progressing towards recovery. This is really the narrowest escape on record. It was a lucky thing for the nigger the doctor was not in a hurry."

Enquirens (Leeds).—There is no doubt that by some subtle process fusel oil does slowly disappear from spirits, both in cask and bottle. The older the spirit the more wholesome it is, and the less amylic and other alcohols are found in it. It is, however, impossible to fix any exact period at which all fusel oil will have disappeared, if it ever entirely disappears.

Mr. F. A. Gray (Ottery St. Mary).—Probably next week.

"DOCTORS *versus* PHYSICIANS."

To the Editor of THE LANCET.

SIR,—I would not have asked space in your columns to further spin out this already well-worn subject were it not that in your correspondence columns of May 30th "Physician and Surgeon" has a fling at Scotch University degrees as unfair as it is contemptible. In the course of his letter he says, "Some of my fellow-students, with an amount of worldly wisdom, seeing not only that the London degree was impossible for them, but that the London Colleges were beyond their reach, went to Scotland, where they and their fees were welcomed, and in due time these men returned with their M.B., C.M. *Now*, only one of these graduates held any clinical appointment at the hospital, and with that one exception they would be classed among the non-industrious men of their year. In the meantime many of us remained in London, steadily working through the clinical appointments and getting our qualifications."

The ignorance of a large proportion of London men in regard to Scotland and Scotch education may plead some excuse for "Physician and Surgeon" in making the above statement, but it does not altogether exonerate him from blame. I wonder if the writer of the letter referred to knew the gentleman (also from "one of the largest London hospitals") whom I had the honour of meeting at Glasgow University. Before leaving London he had thoroughly provided himself with a full Highland dress, in order, as he explained, to meet on terms of fraternity and equality his Scotch fellow-students, all of whom he expected to find clad in the "garb of old Gaul." As, however, his preliminary peregrinations in the capital of the West of Scotland discovered to him a people irrecognisable, except in the more cultured appropriation of the letter "h," from the denizens of the Strand, he, fortunately for himself, appeared at the opening of the session at Gilmore-hill clothed in his right mind and a pair of trousers. It may be interesting to state that this gentleman had, to my knowledge, two trials for the M.B., C.M., but up to the time I lost sight of him he was still trying. A similar fate would have befallen "Physician and Surgeon" and his friends, had they worked less steadily in Scotland than they did in London.

This tremendous jealousy about medical titles is in my opinion, and in that I believe of most sensible people, as absurd as it possibly can be. The holder of the L.R.C.P. Lond. and M.R.C.S. Eng. is from a professional point of view exactly the equal of the holder of the M.B. C.M., no more and no less.

In conclusion, might I be allowed to suggest that, instead of the holders of one qualification trying to exterminate the holders of another, the energy so thrown away might be more profitably expended in a conjoint effort to exterminate those who undertake the practice, or rather malpractice, of medicine without any qualification at all. This unqualified horde is daily taking a larger slice of the bread out of the mouths of those who have expended their brains and their money on the attainment of that which in the present state of the law is apparently a superfluous luxury. I am, Sir, your obedient Servant,

JAMES D. FARQUHARSON, M.B. C.M. Glas.

Newcastle-on-Tyne, June 2nd, 1885.

To the Editor of THE LANCET.

SIR,—It seems to me that this wrangle between the M.D.s and the Licentiates of the College of Physicians is very undignified, and will never benefit either party. Each party has a good case: the M.D. has gone to some extra expense possibly (but not necessarily) to get his degree and his "social status" (I would suggest to "M.D." that he might discover men who did not possess a degree, and yet possessed a good "social status," and did not deem it necessary to go to St. Andrews or elsewhere to raise their position in society); and the L.R.C.P., who is often the most deserving man, has preferred to sacrifice his chance of a degree for the sake of a better and more practical education. The University of London should meet both parties. Let them grant the M.D. to the present Licentiates of the College of Physicians, after a special and sound practical examination for the same, and let the future regulations of the University be so altered as to be within the reach of all the average London students. I most certainly think that the possession of a degree should alone grant the right of the title of Doctor of Medicine; and surely it would not be beneath the dignity of the University of London to grant special facilities for the Licentiates of the London College to proceed to their degree through the loophole of some specially arranged examination or examinations, and thus give them an opportunity of putting themselves on a par with the swarms of Scotch and Irish graduates, who have passed no harder, if so hard, examinations as the Licentiates of the London College.—I am, Sir, yours truly,

June 6th, 1885. L.R.C.P. Lond.

To the Editor of THE LANCET.

SIR,—Much has been written of late as to the propriety of Licentiates of the Colleges of Physicians using the title of "Doctor." With respect to this subject, I beg to draw the attention of the numerous readers of THE LANCET to the following facts:—(1) That it has been the custom from time immemorial for holders of a legal medical diploma to style themselves "Doctor." (2) That no law of Great Britain or Ireland forbids the holders of such legal medical diploma from styling themselves "Doctor." (3) That Bachelors of Medicine of the various Universities almost invariably style themselves "Doctor," though they have no more right to such title than Bachelors of Law, Music, Science, &c. (4) That persons possessing a legal medical diploma have as much right as Bachelors of Medicine to style themselves "Doctor." From a consideration of these four points, I venture to draw the conclusion that holders of a legal medical diploma will continue to use the title of "Doctor" regardless of all that may be written to the contrary, and until they are strictly forbidden to do so by the law of the land, or by more stringent regulations from the various Colleges of Physicians.

I am Sir, yours truly,

AN UNDERGRADUATE OF VICTORIA UNIVERSITY,

June, 1885. MANCHESTER.

TREATMENT OF GLEET.

To the Editor of THE LANCET.

SIR,—I have met lately in practice some cases of gleet which were quite unaffected by the remedies found in ordinary surgical text-books. I employed injections of sulphate of zinc, sulpho-carbolate of zinc, and various other astringents, together with copaiba, &c.; but all proved in vain. I found the following treatment more successful.

1. Bougies made of gelatine and mucilage in which the sulphate or chloride of zinc was suspended, together with opium and belladonna if any tenderness existed. These are known as Regnal's bougies, or the "porte-remède Regnal." A bougie is introduced every night into the urethra, and lint and oil silk rolled round the penis, and secured in order to prevent any gelatine which might escape from soiling the linen. The bougie soon becomes absorbed. In addition to this, I prescribed a solution of yellow santal, with buchu and cubebs, two drachms every day. This treatment, together with a well-regulated dietary and abstinence from alcohol, seldom failed. A blister on the sacrum is sometimes very beneficial. Some authorities recommend cubebs in powder, from twenty to thirty grains every day; but I think the above preparation of Hewlett is more easily taken, not to speak of the advantages of the combination.

2. In more protracted cases, with much induration and narrowing of the urethra, gradual dilatation with flexible bougies is the only remedy. These should be introduced two or three times a week till the discharge ceases. It is a good plan to smear the bougies with balsam of copaiba before using them. Dr. Otis of New York says that gleet is always dependent on stricture, and that "complete restoration of the urethra to its normal calibre and suppleness at the contracted points will be required to warrant the statement that a permanent cure has been effected."

Mr. Berkeley Hill has alluded to an instrument devised by Dr. Otis for strictures of wide calibre—viz.: "Where the canal has been dilated by instruments that reach the full normal size of the greater part of the canal, but are not sufficient to fairly stretch the bulbous part, which has naturally a greater calibre than the penile portion, and is the situation where these troublesome affections are usually placed, he introduces an instrument which, while it stretches the part concerned, also nicks or incises it slightly by a cutting edge which is made to protrude against the tightened membrane." This instrument, slightly modified by Mr. Hill, is sold by Coxeter of London.

I am, Sir, your obedient servant,

June 22nd, 1885. L.R.C.S.I.

TIBBITS FUND.

WE have received from Sir William Jenner, Bart., the sum of £5 5*s.* on behalf of the above-named fund.

THE WATERS OF CONTREXÉVILLE.

To the Editor of THE LANCET.

SIR,—I am glad to see that Dr. Cruise is favouring us with his notes of a visit to Contrexéville, although I fancy that both that place and the neighbouring Vittel are better known in England than he supposes. Dr. Cruise says that when he first heard of the former place "it appeared to be unknown in England." Permit me to say that its waters were mentioned as solvents of calculus in my "Baths and Wells of Europe" in 1869, and, further, in the second edition of that work in 1873, as useful in catarrh of the bladder.—I am, Sir, yours faithfully,

June 29th, 1885. JOHN MACPHERSON.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Hughes Bennett, London; Mr. Greig Smith, Bristol; Mr. Vose Solomon, Birmingham; Mr. Wharton Jones, Ventnor; Mr. Morrant Baker, London; Rev. F. A. S. Reid, Streatham; Dr. Totherick, Wolverhampton; Mr. F. A. Gray, Ottery St. Mary; Messrs. Brand and Co., London; Mr. Ethelston, Balham; Mr. Pinder, Broughton; Mr. A. McDougall, Manchester; Dr. Cartwright Reed; Dr. Grosvenor, Hampstead; Dr. Gowers, London; Dr. Percy Kidd, London; Mr. W. Whitehead, Manchester; Dr. Woakes, London; Dr. G. E. Paget, Cambridge; Mr. W. Cunningham, London; Mr. Edward Clarke, London; Dr. R. Neale, South Hampstead; Mr. W. S. Rogers, London; Messrs. Starley and Sutton, Coventry; Mr. Mayo Robson, Leeds; Messrs. G. Mason and Co., London; Mr. Rutherford, Newcastle-on-Tyne; Mr. Gunn, London; Mr. J. Macpherson; Mr. L. Humphry, Cambridge; Dr. J. Macpherson; Dr. Harries, London; Dr. Sainsbury, London; Mr. R. Baker, Bombay; Mr. Harrison Cripps, London; Mr. J. Hall, Peel; Mr. Collier, London; Dr. J. Ward, Sutton Coldfield; Mr. F. V. Fitzpatrick, New Swindon; Dr. Thomas, Sheffield; Mr. C. F. Tindal, London; Mr. Bertram Thornton, Margate; Dr. Bell Taylor, Nottingham; Mr. Crewes, Truro; Mr. Hay, Hull; Mr. Maythorn, Biggleswade; Mr. Thomson, Wolverhampton; Dr. Heelas, Bonchurch; Mr. Juler, London; Mrs. Ling, Saxmundham; Mr. Halliday, Lockerbie; Mr. Fox, Bristol; Messrs. Walker and Co., London; Mr. Mackenzie, Bijapur; Messrs. Atkinson and Co., Kendal; Mr. Ottley, Tring; Mr. Hand, Ben Rhydding; Mrs. Pratt, Cardiff; Messrs. Robertson and Scott, Edinburgh; Messrs. Kegan Paul and Co., London; Mr. Keating; Messrs. Blackie and Son, Glasgow; Mr. Ripley, Southport; Mr. Orridge, London; Mr. Brown, Dumfries; Messrs. Simpson and Co., London; Mr. Scott, Manchester; Dr. Ritchie, Ottley; Mr. Nuttall, Norwich; Mrs. Peal, London; Mr. Foster, Greenwich; Mr. Waller; Messrs. Newbery and Co., London; Mr. Grant, Birmingham; Messrs. Perkins and Son, London; Mr. Richardson, Liverpool; Scrutator; M.D., Durh.; Practitioner; Omega, London; Falt.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Bowman; Dr. Oxley, Streatham; Mr. Dunn, Preston; Dr. O'Neal, Llansantffraid; Mr. Fraser, Manchester; Mr. Kerr, Glasgow; Mr. Smith, Kilburn; Mr. Jones, Crickhowell; Messrs. Reynolds and Branson, Leeds; Mr. Cowry, Upton-on-Severn; Messrs. Lennon and Co., London; Mr. Moore, Belfast; Dr. Latham, Cambridge; Dr. Harley, London; Mr. Hines, Baildon; Mr. Diggins, Lancaster; Dr. Jefferies, Gainsboro'; Dr. Pringle; Mr. Sabin, Worthington; Dr. Sutherland, Castletown; Mr. Couldrey, Scunthorpe; Mr. Frederick; Messrs. Beal and Son, Brighton; Mr. Gray, Rochester; Mr. Macgregor, Huddersfield; Dr. Basu, Patna; Mr. Forbes, Stonehaven; Dr. Ritchie, Otley; Mr. Cressy; Mr. Gunning, London; Messrs. Hamlett and Co., Hornsey; Mr. Buller, Ely; Mr. Roberts, London; Mr. Godfrey, Balham; Mr. Williams, Talgarth; Mr. Kershaw; Dr. Roberts, Ramsgate; Mr. Freeman, Tetbury; Mr. Somerville, Lenham; Mr. Carter, Shepherd's-bush; Messrs. Mackay, Edinburgh; Mr. Mitchell, Holbeach; Alpha, Manchester; Matron, County Hospital, Ayr; W. W.; F. W., Cumberland; H. S. M.; Cleopatra; D. Y.; A. H. C., Burton-on-Trent; F.S.A., Wye; Belladonna; B. H., Abergavenny; A. B., Dulwich; G. O. M.; Vade Mecum, Liverpool; Secretary, Royal Infirmary, Manchester; D. W. T., Dundee; H. M. P.; C. E., Camden-town.

Dundee Advertiser, Scotsman, Bendigo Advertiser, Kimberley Diamond Fields Times, Times of India, Kimberley Daily Independent, &c., have been received.

Medical Diary for the ensuing Week.

Monday, July 6.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M., and on Tuesdays at the same hour.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—5 P.M. General Monthly Meeting.

Tuesday, July 7.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Wednesday, July 8.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department: 9.30 A.M., on Tuesdays and Fridays.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.

Thursday, July 9.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, July 10.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

Saturday, July 11.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
MIDDLESEX HOSPITAL.—Operations, 2 P.M.

SUBSCRIPTION.

POST FREE TO ANY PART OF THE UNITED KINGDOM.

One Year	£1 12 6	Six Months	£0 16 3
To CHINA AND INDIA		One Year	1 16 10
To THE CONTINENT, COLONIES, AND UNITED STATES		Ditto	1 14 8

Post Office Orders should be addressed to JOHN CROFT, THE LANCET Office, 423, Strand, London, and made payable at the Post Office, Charing-cross.

Notices of Births, Marriages, and Deaths are charged five shillings.

Cheques to be crossed "London and Westminster Bank."

ADVERTISING.

Books and Publications (seven lines and under)	£0 5 0
Official and General Announcements	0 5 0
Trade and Miscellaneous Advertisements	0 4 6
Every additional Line	0 0 6
Front Page per Line	0 1 0
Quarter Page	1 10 0
Half a Page	2 15 0
An entire Page	5 5 0

The Publisher cannot hold himself responsible for the return of testimonials, &c., sent to the office in reply to advertisements; copies only should be forwarded.

NOTICE.—Advertisers are requested to observe that it is contrary to the Postal Regulations to receive at Post-offices letters addressed to initials only.

An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements on page 2, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.

Advertisements are now received at all Messrs. W. H. Smith and Son's Railway Bookstalls throughout the United Kingdom, and all other Advertising Agents.

Tables of Contents, with the Index of Advertisements, for each Number can be had on application to the Publisher.

Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.